Arkansas State College
Library

Airman

OFFICIAL JOURNAL OF

D1.60:

OUR PURPOSE IN BEING

This is the job the nation has given the U. S. Air Force:

(NATIONAL SECURITY ACT OF 1947, AS AMENDED)

- ***Organize, train, and equip Air Force forces for the conduct of prompt and sustained combat operations in the air—specifically, forces to defend the U. S. against air attack in accordance with doctrines established by the JCS, to gain and maintain general air supremacy, to defeat enemy air forces, to control vital air areas, and to establish local air superiority except as otherwise assigned.***

- ***Develop doctrines and procedures, in coordination with the other Services, for the unified defense of the U. S. against air attack.***

- ***Formulate doctrines and procedures for the organizing, equipping, training, and employment of Air Force forces.***

- ***Develop, in coordination with the other Services, doctrines, procedures, and equipment for air defense from land areas, including the continental U. S.***

- ***Organize, train, and equip Air Force forces for strategic air warfare.***

- ***Furnish close combat and logistical air support to the Army, to include airlift, support and resupply of airborne operations, aerial photography, tactical reconnaissance, and interdiction of enemy land-power and communications.***

- ***Provide air transport for the Armed Forces, except as otherwise assigned.***

- ***Organize and equip Air Force forces for joint amphibious and airborne operations, in coordination with the other Services, and to provide their training in accordance with doctrines established by the JCS.***

- ***Furnish aerial photography for cartographic purposes.***

THE Airman

OFFICIAL JOURNAL OF THE AIR FORCE

Volume V, Number 1 January 1961

Director of Information, Office of the Secretary of the Air Force, Maj. Gen. ARNO H. LUEHMAN. *Chief, Internal Information,* Col. ROGER B. PAYNE. *Editor,* Lt. Col. HARMON H. HARPER. *Assistant Editor,* Maj. ROBERT J. FLANAGAN. *Executive Editor,* TED R. STURM. *Departmental Editor,* SMSgt. HAROLD E. BAMFORD. *Art Director,* SMSgt. LESTER B. BOUNDS. *Production and Distribution,* RUSSELL M. WOODS.

USAF RECURRING PUBLICATION 30-15

CONTENTS

THIS IS OUR POSITION 2
Flying saucers: fact or fancy?

SEARCHED, SIGHTED, SAVED 6
Teamwork pays off in rescue operation.

CLUES FROM YOUR CALENDAR 10
Tasty tidbits of historical interest.

AWAKENING AFRICA 12
New members join the Family of Nations.

OCS TODAY 14
How enlisted airmen can qualify for commission.

WHAT DO YOU KNOW ABOUT THE AIR FORCE? . . . 19
A quiz for the well-informed airman.

MEMORABLE EVENTS OF 1960 21
A year of accomplishment passes in review.

CONGO TRIP 227 28
Intimate glimpse of MATS airlift mission.

INSTANT LOGISTICS 32
New streamlined system for aerial supply.

AIR SUPPORT FOR *OPERATION MADISON* 42
Medals of Honor in the drive for the Rhine.

REVOLUTION IN THE ORDERLY ROOM 44
A new approach to personnel records.

DEPARTMENTS

LETTERS TO THE EDITOR 1 SLANTS ON SPACE . . 35

AIRMAN'S WORLD . . 37

Editorial Office: THE AIRMAN, Room 2-206 Tempo E, 4th and Adams Drive, S. W., Washington 25, D. C. Telephone, OXford 6-7393.

THE AIRMAN is primarily a medium for the exchange of ideas and information among Air Force personnel. Readers are encouraged to submit articles, short subjects, photographs, and artwork.

LETTERS TO THE EDITOR

A Distant Voice

Sir: I have been in your great country as an exchange student and experienced democracy in action.

Upon my return to Greece, I was drafted by the Hellenic Army and, because I speak Turkish, was assigned as an interpreter to HALFSEE (NATO, Izmir-Turkey). Now, since 1 March go I work for the 7206th SUPPGRU (USAFE) at Athenai Airport as an interpreter of the Air Police. My devotion to the duty and the ideals of the United States has been appreciated in written by Capt. USAF Richard Holley on behalf of the 7206th SUPPGRU Commander. Upon my separation from this organization, as I resigned 15 October '60 to work now for the U. S. Embassy, Athens, I shall be very obliged if you publish the following in your respective magazine.

"Adios Amigos! Mr. Nick H. Kasnakides, Greek civilian, interpreter of the Air Police, 7206th SUPPGRU (USAFE) at Athenai Airport, who was resigned and will now work for the U. S. Embassy, Athens, extends his most sincere 'so long' to all officers, EMs, and U. S. civilians he met during his employment since 1 March 1960."

Nick, much delighted with his experience gained with the USAF, says: "It was a pleasure for me to work with so understanding, cooperative and devoted airmen and I surely owe them a lot of experience."

Nick continues: "Since my first day with the Air Force, I have realized

(Continued on page 36)

★ ★ ★

This month's cover is adapted from a painting by Mr. Harold von Schmidt.

. . . this is ou

Flying Saucers—The Official Air Force Posi

As General Thomas D. White has indicated, the Air Force investigation and analysis of UFOs over the United States are directly related to its responsibility for the defense of the United States. Because prompt reporting and rapid identification are necessary to carry out the second of the four phases of air defense, detection, identification, interception, and destruction, the Air Force maintains the unidentified flying object program.

Statistics on the number of objects sighted and reported to the USAF for the past 13 years are as follows:

1947	79	1954	429
1948	143	1955	404
1949	186	1956	778
1950	169	1957	1,178
1951	121	1958	573
1952	1,501	1959	364
1953	425	1960	173
		TOTAL	6,523

In analyzing the above figures the reader will s see that the Air Force's peak years for UFO re sightings were 1952 and 1957. Further analysis that there are usually definite reasons or specific dents causing a peak year or a rash of sightin the year 1952 the famous Washington sightings t off a rash of sightings for the last six months o year. In 1957, *Sputnik I,* the Russian satellite launched in October. Seven hundred and one total sightings for that year took place in the last months of the year. This is most significant.

In all the correspondence received by the Air over the past 13 years there are a number of tions and charges against the Air Force which peated time and time again and which should b cifically answered.

The first charge states that there is a document September 23, 1947 which is a *Secret* conclusi the Aerospace Technical Intelligence Center th flying saucers were real.

D 301.60:
5

...osition

From the book *Flying Saucers and the U. S. Air Force*, by Col. Lawrence J. Tacker, USAF. Reprinted with permission D. Van Nostrand Co., Inc.

The second charge states there was a 1948 *Top Secret* document concluding that the unidentified objects were interplanetary spaceships.

The third charge states that a *Secret* Air Force intelligence analysis of UFO maneuvers concludes that these objects are interplanetary.

The fourth charge states that a *Secret* report by a panel of top scientists convened in the Pentagon in January 1953 urges that the Air Force quadruple its UFO project and that the Air Force give the American people all UFO information, including *Secret* Air Force conclusions, unsolved sightings and photo analyses.

In answer to the first charge, there is no official Air Force report or document which states that the so-called flying saucers are real. The writer does not doubt that in the early days of the UFO program many possibilities, including this one, were probably listed in order to develop an adequate investigation and evaluation program for the Air Force. Also, it is conceivable that some person or persons associated with the Air Force program were personally convinced that flying saucers might be real and could be interplanetary spaceships.

In answer to the second charge, there has never been an official Aerospace Technical Intelligence Center estimate of the situation which stated that so-called flying saucers were interplanetary spaceships. Again, individuals associated with the early Air Force program, listing all possibilities, would probably have considered such a category but such a conclusion or document reaching such a conclusion is non-existent.

The answer to the third charge is that such a report or intelligence analyses is non-existent. There is no such report. Again, there has never been an Aerospace Technical Intelligence Center conclusion that any of the UFOs were interplanetary.

The answer to the fourth charge is a simple one. On January 14, 15 and 16, 1953, at the request of the United States Air Force, a scientific advisory panel was established to consider the UFO program and to make recommendations based upon their conclusions. The recommendations of the panel as reported in the fourth charge above are completely erroneous. The final conclusion reached by the panel since declassified and released to the public were that UFOs (a) held no direct physical threat; (b) were not foreign developments capable of hostile acts against the U. S.; (c) were not unknown phenomena requiring the revision of current scientific concepts, and (d) the panel further concluded that unless de-emphasized, UFOs, or the subject itself, could constitute a threat to the national security because a rash of sightings could affect defense communications, national hysteria could be induced by skillful hostile propagandists, and a mass of false reports could screen planned hostile actions against the United States. As a result of this 1953 meeting, the panel made the following basic recommendations:

(a) That immediate steps be taken to strip the UFOs of the aura of mystery which they had unfortunately acquired;

(b) that the public be reassured of the total lack of evidence of inimical forces behind the phenomena;

(c) that Air Force investigative personnel be trained to recognize and reject false indications quickly and effectively.

An additional charge against the Air Force is that it is afraid to tell the public the truth concerning flying saucers because of the national hysteria and panic which will result. This is, of course, a ridiculous argument because the same groups hurling these charges and allegations against the Air Force are continually telling the public the same thing they want the Air Force to say and there is no resulting panic. The real truth of the matter is that the public itself trusts our government and our Air Force and does not believe that space people are visiting our planet in extraterrestrial vehicles.

Reporting, investigating, analyzing, and evaluating procedures have improved considerably since Kenneth Arnold's sightings of the flying saucer on June 27,

1947. The study and analysis of reported sightings of UFOs is continued today by selected scientific personnel under the supervision of the Air Force and by qualified scientists and engineers from outside the Air Force on a contract basis.

Dr. J. Allen Hynek, Professor of Astrophysics at Northwestern University and Associate Director of the Astrophysical Observatory for the Smithsonian Institution, Cambridge, Mass., is the chief scientific consultant to the Air Force on the subject of UFOs. In this capacity Dr. Hynek presided at a committee meeting held by the Department of the Air Force in the Pentagon on February 17, 1959, for the purpose of discussing the Air Force philosophy toward, and policy regarding, the unidentified flying object program.

Recommendations resulting from this meeting were as follows. The Air Force must continue to take a positive approach toward the UFO program. Air Force investigations of reported sightings must be thorough and scientific with all possibilities considered. The entire resources of the Aerospace Technical Intelligence Center must be made available to help with the overall analysis and evaluation program of reported UFOs and the *public must be kept fully informed* of the Air Force position regarding UFOs. These recommendations have been carried out and today a special Air Force UFO committee meets each month to make sure that every means available is being used in pursuit of a positive UFO investigation program and that a thorough information program is being conducted to keep the public informed.

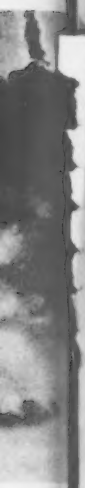
Natural phenomena, such as this bright fireball meteor, are often mistaken for "Flying Saucers."

The official Air Force position can be summed up in a few words. In its attempt to put the UFO subject in proper perspective, it appears that the Air Force cannot compete with the science-fiction writer in satisfying the desires of those people who wish to believe in spaceships. The Air Force believes that the investigation of the UFO phenomena is in responsible hands and that an adequate, thorough, and honest program is being conducted. Regardless, a small but articulate segment of people are under the mistaken belief that the Air Force has not sought the assistance of outstanding authorities from outside the Air Force to assist in its evaluation of UFO sightings and that it is withholding vital UFO information from the public thereby preventing proper evaluation. On numerous occasions the Air Force has publicized its conclusions relative to UFOs and explained the evaluation process. This group, nevertheless, continues to claim that UFOs are objects from outer space and demand Congressional hearings on the subject. The continued interest of this small segment is understandable because the subject is so novel and fascinating that it supports over a hundred organizations of one type or another. Most of these organizations publish news releases or magazines and they expect the Air Force to furnish them grist for their publication. Needless to say, the Air Force does not have the resources alloted to this project to fill these numerous individual requests which organizations make for copies of investigative reports and other related material.

This cigar-shaped mystery object in the sky is really a B-36 type aircraft in beam of sunlight.

In addition, the Air Force would be remiss in its duty to the American public if by its assistance, it encouraged these organizations in their sensational claims and contentions. The Air Force cannot give them individual attention but rather makes periodic releases available to those groups through established news channels. In so doing, it shows no partiality to any person or organization, nor does it place itself in the position of placing its stamp of approval on or giving preferential treatment to any one of them.

This press release approach, used by all branches of



sky is
unlight.

o believe
e investi
ble hand
program
articulat
elief tha
of out
Force t
that it i
e public
numerou
nclusion
process
at UFO
gressiona
st of thi
e subject
s over
er. Mos
or maga
nish them
the Air
l to this
sts which
e reports
iss in its
ce, it en
nal claim
hem indi
releases
ned news
y to any
elf in the
or giving
anches o
e Airmen

government, is considered censorship by many of these organizations and because the Air Force will not favor them with individual attention they contend that it is keeping vital information from the public. The Air Force was compelled to adopt the press release approach because in the past when it furnished factual information to certain writers of UFO books upon their individual requests, the action was interpreted as granting approval and clearance to the books in which the information was used.

If the Air Force withholds certain information from the public on UFOs, such as the names of individuals reporting sightings, it is not done for the purpose of depriving the public of vital information necessary for proper evaluation. Nor is it done because there is scientific proof of the existence of spacecraft from other planets and it does not wish to alarm the American public. It is done in the majority of instances to protect the people involved from the idle curiosity of the sensation seekers. In a few instances it is done to keep from compromising investigative processes and if necessary, it is done for legitimate security. This last instance is one this small group fails to recognize as legitimate and yet every citizen must recognize that specific information could benefit a potential enemy. An example of this would be a reported radar UFO sighting by one of our defense radar installations which was caused by some specific weather condition such as a temperature inversion. If this certain set of atmospheric conditions would always, or generally, produce spurious radar returns on the scope, it would become classified information. The reason for this is obvious. Any potential enemy could try to penetrate our defense radar at the particular geographical point when the atmospheric conditions were just right.

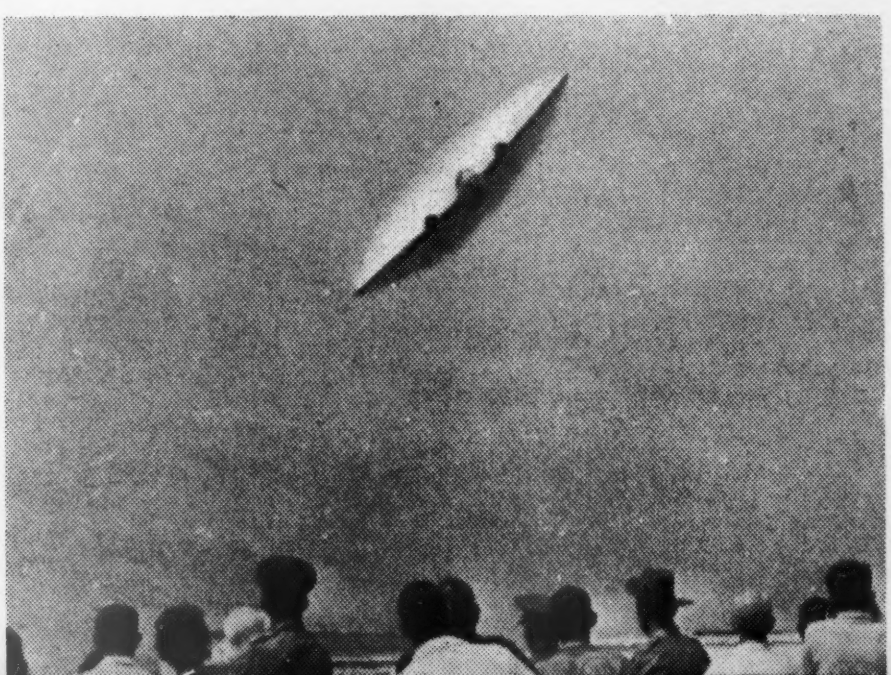
In this regard, it should be repeated here that there is no classified material on file in the Air Force which proves or concludes that interplanetary space travel exists in reverse.

The Air Force has a tremendous task in defending this country against weapon systems which we know actually exist and are in the hands of our potential enemies. To divert more men and money away from this most serious mission into a greatly enlarged program for the investigation and defense against UFOs about which we have been unable to discover one iota of tangible scientific evidence, would seriously jeopardize the security of this country against a known proven threat; would be allowing the sensation seekers to dictate our defense policies and would lay the Air Force open to the charge of gross imprudence.

The Air Force does not deny that unknown objects have been seen by responsible people. It is in the interpretation of these sightings that they are questioned. From its investigations covering the past 13-year period, the Air Force contends that when the evidence of these sightings has been sifted through the scientific criteria it has always led to the conclusions that the objects were not spacecraft and they did not constitute a threat against the security of this country. As an act of faith, the UFO can be considered manned or unmanned craft from outer space. But as a scientific fact there has been no authenticated scientific evidence presented to or discovered by the Air Force to support this conclusion.

Finally, when space travel is accomplished by the United States or should the Air Force discover that spaceships exist from out of this world, official government announcements would be made immediately through the Department of Defense to this effect.

And that's the story to date. There just are not any manned spaceships yet. There are what might be called "flying saucers" under development but they are really aircraft which operate within the atmosphere and are definitely not spaceships. . . .



Aircraft in a tight turn in rainy, misty weather assumes appearance of flying saucer over the heads of spectators.

Searched, Sighted, Saved

No call for help goes unanswered

Capt. T. J. Slaybaugh, USAF

AT MYRTLE BEACH AFB, S. C., seven F-100 *Super Sabre* jets taxied to the active runway. The huge fighters, so sleek and deadly in the air, wallowed under full fuel loads, including twin 450-gallon tip tanks. In the cockpit of each a helmeted figure, dimly visible in the subdued red glow of instrument lights, alternated between a visual lookout to maintain spacing, and interior scanning as taxi checks were completed.

The first fighter rolled onto one side of the runway, a wingman opposite and slightly behind. The blinking wing lights were overshadowed by a growing length of brilliant orange-white flame from the exhaust. A steadily increasing roar of sound accompanied the lengthening flame until brutally beaten air trembled the earth.

"Rolling," the leader said, as his gloved left hand shoved the throttle forward into afterburner. In quick succession all seven followed, arcing in steep climbs into the dark sky.

Almost as suddenly as it had started, the thunderous disturbance faded from the Carolina countryside. A knot of men, mechanics and transient alert personnel, disbanded and headed back for the hangars along the ramp. There would be no further need for their service tonight.

The seven Tactical Air Command pilots climbed rapidly, turned out over the east coast and headed across the Atlantic. A routine rotational mission was underway. Within a few hours, if all went well, they would make a steep penetration from the high, thin air in which their Century-series fighters operated efficiently and settle down on a long concrete strip in Spain.

To understate, crossing an ocean in a single engine fighter poses some problems. Navigation is one. Another is hooking up with refueling tanker planes. Still another—one that rides as a gnawing fear in the back of each pilot's mind—is engine trouble. This is a chance each pilot has to take. Rarely does the powerful jet engine quit, but it can.

But things were smooth at 32,000 feet this night. The seven F-100s had settled into one flight of four and another flight of three. Radio contacts were good and no malfunctions had been reported to the leader. Cruising close to the speed of sound, they sped eastward in loose formation.

But trouble, in this business, can appear as suddenly as darkness when a candle is snuffed out in a cave. That's how it happened to 1st Lt. Robert Picht, flying a wing position in the lead element. One moment the subdued whine of his speeding jet reassuringly filtered through his helmet—the next there was deadly silence. Flameout!

The winking lights of the three other planes in the lead element rapidly pulled away above him. His lights went out.

"Flameout! I'm falling behind!"

For a moment there was no reply. Capt. Jack Bryant, leading the second element, waited just long enough to give Picht's flight leader a chance to reply, then answered the call himself. He knew that there would have been an immediate acknowledgement had the first element leader heard the call. The dreaded flameout beyond reach of land didn't leave much air time for the heavy fighter.

Bryant ordered his element to continue on, pulled back on his own throttle, and announced he would stay with Picht.

The lieutenant wasted no time. Panic was held in check by his disciplined reaction. Procedure was automatic. He had practiced it hundreds of times in simulated situations. He punched a button. The 450-gallon fuel tanks on each wing dropped free, arced smoothly as they left the wings, then tumbled crazily into the darkness below.

Following pre-planned procedure, the third man of the element, Capt. Donald G. Duff, called off the step-by-step airstart procedure to Picht. No use. RPM had dropped to zero. The engine had frozen.

Picht stayed busy. There were some things he could do to help himself—and time was fast running out. The sweeping hands of his altimeter showed he'd never make land. From six miles up the *Super Sabre* simply didn't have the glide ratio to cover the 100 miles to Bermuda. But Picht had immediately turned toward the island. The closer in he was, the quicker help could come. He switched his IFF identification set to emergency—he knew this would paint the best return on radar scopes at Bermuda. He also changed his radio to the Ultra High Frequency emergency setting of 243 megacycles.

There was no need for his calling for help, however. He heard Bryant, now sitting out there, reassuringly, off his wingtip, calling MAYDAY, and reporting the emergency to Kindley AFB.

Picht told Bryant that he would eject at 5,000 feet. With frequent glances at his altimeter he hurriedly cleaned up the cockpit. He disconnected all personnel leads except his radio cord. This was his last link with Bryant and he wanted to preserve it as long as possible. As the altimeter moved through 5,500 feet, Picht made his final announcement.

"I'm bailing out."

Picht jerked the microphone cord loose and connected the zero time delay lanyard to his parachute D-ring. This device would actuate upon ejection and

automatically pull the ripcord of his 'chute. It had saved lives in low altitude bailouts, and could save his if he should be stunned upon ejection. He lowered his visor and pulled up the seat handles. A sharp report followed and the canopy was blown clear. Picht sat erect, pressed his helmet against the headrest and jerked the right hand grip trigger. The second charge sent seat and pilot catapulting from the stricken fighter.

Both the automatic lap belt and zero lanyard worked as designed. At the completion of his second forward tumble the seat dropped away and Picht felt the tug of the parachute on his shoulders. Looking up he saw the fully opened canopy.

He took off his helmet and threw it away. His fingers found the cord on one of the CO_2 cartridges. He jerked, and swishing air filled the left side of his Mae West type life vest.

Picht knew a parachute was fine for coming down in an emergency, but he also had heard it was possible to drown if the 'chute settled over and smothered the jumper in the water. Sitting well back in the harness, he unhooked the leg and chest straps. He was going to be ready to swim out from under the canopy if necessary. He next felt for the little one-man dinghy. It was missing. He felt for and found the lanyard with which it had been attached to his 'chute harness. The rope was broken.

Preoccupation with checking his equipment had taken all of the lieutenant's attention. In the darkness he had no way of knowing how close he was to the ocean.

Splash! Impact with the water was mild. Picht had no trouble inflating the other half of his life vest. He removed his survival kit from the 'chute harness and tied it to the vest. Next, he freed himself from the 'chute harness. The 'chute floated on the surface and Picht determined to stay near it if possible. The white 'chute canopy would be easier to spot than his bobbing head.

Having no idea of the role he was about to play in an unusual drama, Commander Priest, skipper of the submarine *Growler*, supervised activities as his craft,

bound for Puerto Rico, eased out of Portsmouth on a shakedown cruise.

Cruising on the surface, the *Growler* neared Bermuda. On deck, Lt. Larry Scott, the *Growler's* executive officer was taking his turn standing watch. Time moved slowly, as it does for men who spend hours in the lonely company of darkness and slapping waves.

Suddenly a strange sound, like an explosion, cut through the night from the east. Scott called Priest, telling what he had heard. Priest ran for the radio room, arriving just in time to hear a calm voice say, "I'm bailing out." On deck, Scott glanced at his watch: 0445. He continued to watch and listen. Only seconds elapsed until a fiery explosion momentarily lighted the horizon to the east. Scott reported this to his commander.

Priest and Scott realized they had just witnessed a life-and-death drama in the lonely sky. The *Growler* swung around and raced at full speed toward the spot where the explosion of the crashing jet had been pinpointed by Lieutenant Scott.

At Kindley AFB, Bermuda, a Military Air Transport Service C-121 *Super Constellation* roared down the runway, lifted off, and banked across the inky blackness of the ocean. At the controls was Capt. Bill Laughlin, a veteran MATS aircraft commander and chief pilot in the 41st Air Transport Squadron. With his nine-member crew he had flown the seven-day Charleston-Dhahran run. They were on the home stretch. Thirteen hours earlier they had departed Lajes Airfield in the Azores. In a few hours they would be at Charleston for a welcome reunion with families.

Following the stringent safety code of MATS, they had requested and were being given a radar trackout. Minutes after takeoff the headsets of the C-121 crackled with a startling call from the radar controller. An F-100, inbound to Kindley, had flamed out and presumably ditched. Captain Laughlin didn't hesitate. He immediately requested a vector to the area. Radar advised they had radio contact with an escorting F-100 and furnished Laughlin with an intercept heading.

Word of the emergency was passed quickly to all members of Laughlin's crew. Capt. Kelly H. Burke, Jr., relief aircraft commander, squeezed in behind Laughlin's seat. Remaining crew members picked scanning positions near other windows in the transport. Pairs of squinting eyes tried to pick out a light, or some discoloration in the dark ocean below.

"There's the other F-100," someone called. Sure enough, the blinking lights of Bryant's circling fighter were spotted ahead.

Laughlin contacted Bryant. Yes, an F-100 had flamed out. The pilot had ejected at 5,000 feet. Bryant said that the downed pilot had a supply of red flares, and felt that he could be spotted, even though it was still dark. He gave Laughlin a ditching position based on an omni radio radial and estimated distance from the field. Bryant declared his intention of searching as long as his limited fuel supply permitted, but at this low altitude his huge jet engine was extremely inefficient, burning fuel at a tremendously increased rate.

Kindley radar called again, furnishing an estimated position based on the point the *Sabre's* emergency identification signal had disappeared from the radar scope. Radar also furnished a "line of position" based on a direction finder steer taken by the controller in Kindley's tower. Lt. Ed Brennan, navigator on the C-121, immediately correlated this information with that obtained from Bryant and plotted the most likely search area. The two engineers on the C-121, Sgts. John Slaughter and Walter Lesiak, Jr., computed maximum endurance power settings to permit the longest possible search time.

In the cabin, Sgt. Judson Smith, Jr., instructor flight traffic specialist, had dimmed the lights and assigned scanner positions to his two students, Airmen Gary Bird and Estell Cruz.

Following his navigator's directions, Laughlin flew directly to the heart of the plotted search area. At 1,500 feet he began an expanding square search pattern. Radio calls, monitored by Laughlin and Lt. Sanda B. Helms, first pilot, gave a running account of rescue efforts. Two amphibians, one a Coast Guard P5M and the other an Air Force SA-16, were airborne and enroute to the area. Laughlin established contact with both aircraft, passed on what information he had, and vectored them into the search area. The three aircraft commanders divided the search area and agreed on nonconflicting altitudes of flight. Laughlin eased his transport down to 500 feet.

Bryant called Laughlin and reported that he was leaving because of a critical fuel supply. Bermuda Control called, advising that an Air Force helicopter had departed Kindley to join in the search.

Just as the first grayness of dawn tinged the eastern sky a scanner on the C-121 spotted a light on the surface. Laughlin immediately banked around and headed toward it. But this was no lone survivor—it was a surfaced submarine traveling at high speed. As the C-121 winged over, the *Growler* was called on the Ultra High Frequency emergency channel.

The reply from the sub was prompt and clear. Now, more information was added to the pool. The sighting by the sub's Lieutenant Scott indicated that the probable bailout area was east of the area first plotted. This information was considered the most reliable yet. All three search aircraft moved to the new area, as directed by the submarine. The estimate was 20 miles east of *Growler's* present position.

Lieutenant Picht, in the water now for over an hour, was beginning to feel the effects of his ordeal. His 'chute had sunk. He had checked through his survival kit and his pockets, throwing away everything he could not use. His exposure suit had a slow leak at a ventilator connection and had slowly filled with water to chest level. The water was cold, but fortunately it couldn't circulate.

Just before dawn Picht first noticed the C-121. His hopes rose. The search was on. They were looking for him. He pulled out one of his flares and tried desperately to fire it. His hands were too numb from the cold water. He pulled out his aircrew pistol and managed to fire six rounds.

The C-121 didn't turn toward him. The muzzle flashes hadn't been bright enough to catch their attention. Picht tossed the pistol away.

It was getting light now. The big *Constellation* came by again. Picht figured there might be enough light for the dye marker to be seen. He dumped it out. He continued to work his hands, trying to get a flare set off. Again he saw the transport coming toward him. In desperation now he managed, somehow, to set off a night flare with his numbed hands.

Captain Laughlin, flying his huge transport at reduced speed, 500 feet above the moving gray-black blanket of ocean, swung back and forth in the area indicated by the submarine's skipper. Faces were pressed against the little windows in the plane's long, probe-like nose. Laughlin alternated between searching the sea below and monitoring airspeed, altitude, heading and time.

"There! There! A red flare! There he is, going under the left wing!" Captain Burke cried.

Quickly Laughlin banked left, swinging around in a steep turn. One voice, then another, cried out as the searchers spotted the smoking flare, then the small bobbing head in a patch of water discolored by sea-marker dye.

"Survivor sighted. We are orbiting," came the tension-relieving call over the emergency frequency. Pilots in the Air Force and Coast Guard amphibians headed toward the spot where the big, triple-tailed transport circled.

Lt. Steve Mazur, in the SH-19 helicopter, also moved into the area. Now, the actual rescue was up to Mazur and his crew. Slowly he eased his helicopter down until he was hovering just a few feet above the downed pilot. Airman Al Jones, medical technician, lowered the hoist powered sling. He could see the downed pilot looking around and waving. He should be able to slip into the sling. If not, Jones was ready to dive in and help. Copilot Gary Orr could operate the hoist if Jones had to go into the water.

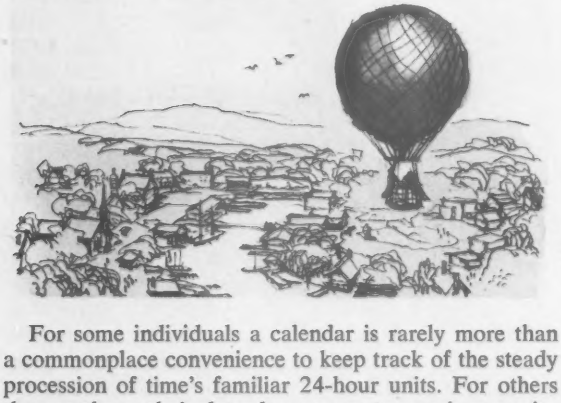
Picht was too elated to notice the numbness in his hands now. He wriggled into the sling while Mazur concentrated on holding the helicopter steady. Jones watched carefully. When he saw Picht was securely in the sling he flipped the hoist switch and the downed flyer was hauled up even with the open helicopter door. Jones swung the survivor inside and called to his pilot, "Take her away, lieutenant. We've got him."

Clues from your Calendar

January is the month when time turns and new beginnings are made. Appropriately enough, it was this month which witnessed the first unfurling of an American flag with the traditional seven red and six white stripes. The date: January 2, 1776; place: Cambridge, Mass.

The embattled hopes and high aspirations of nationhood this new flag held were to attain full realization in the same month, by coincidence, 13 long years later. On January 7, 1789, the fledgling United States of America held its first Presidential election.* The immortal name of the victor in that balloting scarcely needs repeating at this late date.

Interesting bits of Americana, you say, but rather far removed from man's long practical strivings to get into the skies? Perhaps not, everything considered, and proof was forthcoming fairly soon, again in the opening month of a year. On January 9, 1793, the first balloon ascension in the U. S. took place at Philadelphia. Incidentally, this was before the close of George Washington's initial term as chief executive.



For some individuals a calendar is rarely more than a commonplace convenience to keep track of the steady procession of time's familiar 24-hour units. For others the months or their dates have come to acquire associations which can conjure up a variety of very real things which have gone before. Some may be national events of high significance, such as that first Presidential election, or international ones. Some belong in that host of virtually forgotten happenings whose impact on or relation to the future was never suspected by contemporaries. And some are those brief, bygone footnotes to the course of affairs which add a special touch of interest (and on occasion, incredulity) to the overall story in present perspective.

If an annual Air Force almanac is ever compiled, including a fair sampling of this broad range, professional and otherwise, it should never lack for a goodly assortment of arresting entries. Here is a random sampling of possibilities, not a few without evolutionary relevance to what has happened since, down to today.

January 10-20, 1910—the first weight-dropping experiments from a military aircraft were successfully conducted at Los Angeles by Lt. P. W. Beck. In January the following year at San Francisco, the demonstration moved the obvious step further and Lt. M. S. Crissy used real bombs in flights extending from the 7th to the 25th of the month, while Lieutenant Beck tried his abilities at a new task, transmitting radio messages from a plane over equipment of his own design to a ground station.

Keeping abreast of new weapons development and their effective use has long been popularly expected of military establishments but only in the last couple of centuries has lay understanding extended to the importance of reliable communications in time of stress although their vital nature was recognized by those concerned as far back as biblical times.

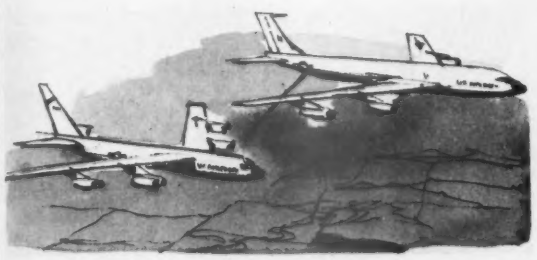
Today there is much preoccupation about the adequacy of tomorrow's available communications channels for strictly civilian purposes, and commercial engineers already are deeply engrossed in studies of relay satellites and possible new transmission techniques as means of coping with coming problems. In the prevailing world climate when so much can hinge on a matter of seconds or their fractions, the subject needs no extra belaboring from a strictly military viewpoint.

In the early national annals of the U. S., there is a classic example of the consequences which slow-motion communications may cause. Again we are at the year's

*The election of 1848 was the first in which all the nation's voters cast their ballots for presidential nominees on the same day—the now familiar Tuesday after the first Monday in November. The Congress three years earlier adopted the legislation for putting the quadrennial elections on this uniform basis. Up until that time presidential voting had varied in date with different states, so returns accumulated piecemeal over a period of days.

start. On January 8, 1815, General Andrew Jackson achieved final victory in the Battle of New Orleans, our greatest success in land operations during the War of 1812. But the Peace of Ghent, ending that conflict, had been concluded two weeks earlier on Christmas Eve. News of its signing, however, did not reach this country until February 11. Ships bearing colonists to these shores registered much better transit time well before the start of the Revolution in 1775.

To skip to a January just over a century later, we find one of those unpretentious footnotes about the evolution of the country's air arm. Its strength at the start of 1916 consisted of 23 MAs (Military Aviators) and JMAs (Junior Military Aviators); 25 aviation



students, and a lone non-flying officer. Inventory: 25 aircraft. Of course this status report becomes virtually inconsequential if considered against what the record shows frequently for Januaries in the previous century —to take one example the discovery of gold in California, January 24, 1848—but the initial promise behind our look at the calendar's current month was to sample a few minor things along with the momentous, as well as some which come in between.

Take New Year's Day, 1929. A pair of Air Corps officers went up in a plane called the *Question Mark*. Their aim: to set an in-flight endurance record by relying on aerial refueling. They landed January 7 after more than 150 hours aloft. Their names: Maj. Carl Spaatz and Capt. Ira C. Baker. Among the public, many dismissed this as a "stunt," but over the horizon there were the first wisps of a shadow which was to become a reality, as well evidenced by the development of flying tankers to the present KC-135 types and the great progress toward sophisticated refueling techniques.

In that same January the first Air Corps plane was ferried to a base outside the ZI, a flight of more than 3,000 miles. How many who read contemporary accounts of this mission recognized the test of a concept which was to see amazing fruition during WW II in the globe-girdling performance of the old Air Transport Command or the versatile operations in strategic logistics by its successor, MATS.

A decade later the start of a new year found an extremely apprehensive world although the Munich Pact for "peace in our time" was scarcely a few months old. Hitler's designs had quickly succeeded with once-independent Czechoslovakia. Clouds over Europe grew ominously darker. In the Orient hostilities were already under way.

Against this somber background on January 12, 1939, President Roosevelt asked the Congress to approve a drastic buildup of the country's air arm, then rated seventh among the world's nations in terms of military aircraft with a total active inventory of 1,600 planes. Specifically, he asked funds to boost plane production for its use to 5,500 annually (the existing rate was 1,200), to increase personnel strength and to inaugurate a primary flight training program which would turn out 20,000 pilots a year.

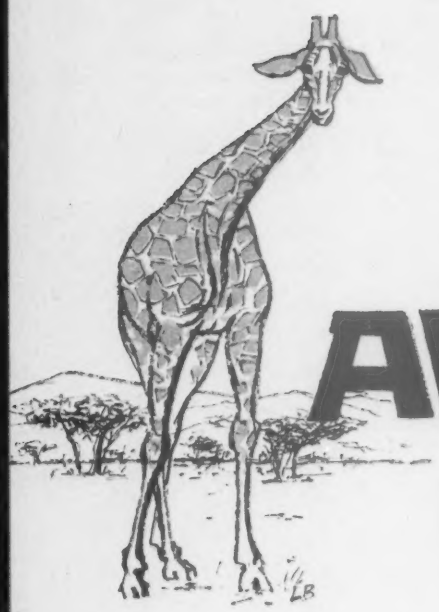
In the opinion of at least some historians, this message is the foundation document in the subsequent massive Air Force buildup of WW II when it became second to none in the global skies—not an also-ran seventh. Particular importance is laid on the advantage gained by the advance start the pilot training program provided. More than a year later, as Axis dominance in Europe grew, the President sharply raised the plane production target to 50,000 a year. The nation's air and associated industries first met, then far surpassed, that objective. What could have been critical in the supply complex the first crucial years was a shortage of pilots. [As one official connected with the training program observed: "A lot of people can be taught how to help manufacture planes, but that same lot of people can't all be taught to pilot them efficiently under combat conditions. Or, to put it another way, it is possible to step up the number of planes produced by increasing manpower, adding shifts, etc. Training good pilots is a far more deliberate and discerning task. And you need the pilots first, or what can you do with aircraft coming off an assembly line." At any rate, historians seem agreed, both the pilots, aircrews and planes were forthcoming in the numbers of took.]

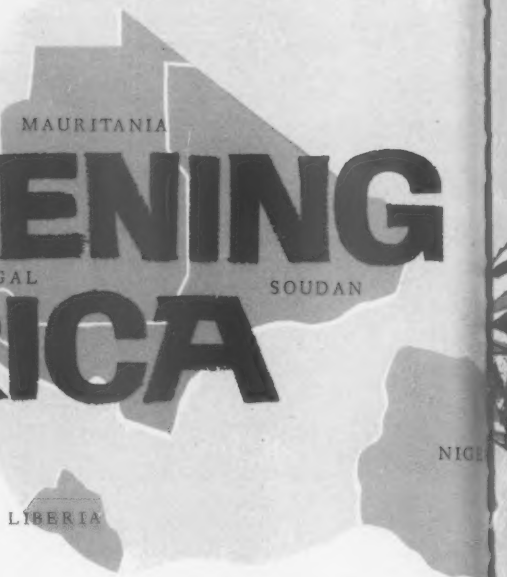
To close with an item in the Space Age category, it was on January 31, 1958, that the Air Force Atlantic Missile Test Center at Cape Canaveral successfully boosted into orbit the first U. S. satellite, *Explorer I*. This was the first of any such vehicles to pay off with substantial scientific bonuses. It not only relayed back data on temperature more than 1,200 miles beyond our planet, the incidence of micrometeorites and information on cosmic ray phenomena; it also discovered the inner Van Allen belt of radiation—the first major find to be recorded in Space research.

This satellite may since have gone silent—its batteries had a life of only four months—but it is still very much up there in orbit, swinging regularly around the globe a bit over every 100 minutes. After launch its lifetime was estimated at between three and five years so it will still be coursing the spaceways for a while to come.

[And the name the satellite bore triumphantly into the far heavens, incidentally, was already richly enshrined in Air Force traditions since the historic stratoflights from South Dakota in the mid-1930s. (For that story, see THE AIRMAN's 1959 July and August issues.)]

—WILLIAM A. KINNEY





AWAKENING AFRICA

by TSgt. John K. O'Doherty, *Airman Staff*

THE fifteenth annual session of the General Assembly of the United Nations opened in New York on Tuesday, September 20, 1960. The occasion was marked by an important speech from President Eisenhower in which he extended welcome—on behalf of the U.S.—to new African states acceding to membership in the U. N.

The year 1960 brought sovereign independence to 18 new nations. Of these, 17 are in Africa. The other is the island of Cyprus in the eastern Mediterranean.

Ten years ago, only four countries on the entire African continent enjoyed complete independence. Oldest of these is Ethiopia, which has existed as a sovereign kingdom since ancient times. Liberia on the southwest coast of the African bulge was founded in 1822 by the American Colonization Society to provide a home for freed American slaves. It became an independent republic in 1847 with a government modeled after that of the U. S. The other two "early birds" are the Union of South Africa (1910) and Egypt (1922).

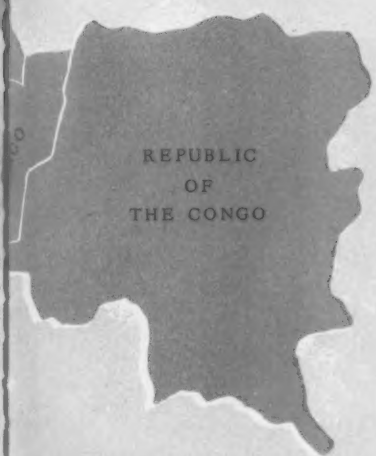
In the years between 1950 and 1958, six colonies or protectorates severed connections with their parent European powers. But 1960 became the banner year for African nationalism. Seventeen other fledglings joined their neighbors in autonomy, bringing the total of sovereign African states to twenty-seven. As these newcomers take their place in the family of nations, each will have a voice as the U. N. discusses the affairs of the world.

Africa south of the Sahara Desert is as big as the United States, India, and China combined. Although some of its cities are crowded, the population is small for so vast an area. Its 200 million people possess thousands of square miles of land and untold mineral riches awaiting development.

The wave of nationalism has produced two separate Congolese republics. A popular conversational nomenclature for distinguishing between the two has not yet been developed. The larger of the two Congo republics is the former Belgian colony in the heart of Africa with Leopoldville as its capital. It was here that the U. N. was requested to settle the instability following accession to independence on July 1, 1960. This new nation covers an area of 905,000 square miles, and has a population of about 14 million. It was in a mine at Shinkolobwe, deep in the Belgian Congo, that uranium was found for the first atomic bomb.

The other Republic of the Congo is much smaller. It lies to the north of the Congo River, and contains about 800,000 people. Before assuming independence on August 15, 1960, the tiny state was an autonomous member of the French Community. Its capital is Brazzaville, just across the Congo River from Leopoldville in the other Republic of the Congo.

Between the Congo country and the Atlantic Ocean on the west lies another very small state, newly independent Gabon. Lambaréné in Gabon is the site of the jungle hospital operated for the past 45 years by the



philosopher and Nobel Prize winner, Dr. Schweitzer. Before assuming independence on August 17, 1960, Gabon was also a member of the French Community. Both retain an association with France in what is now termed simply "The Community" as do many other former French colonies.

The awakening of nationalism in Africa and elsewhere brings the total number of sovereign states in the world to 103. This figure counts each of the divided countries of Germany, Korea, and China as one, and includes this year's final candidate for independence, Mauretania. At the first meeting of the U. N. in 1945, 51 nations dedicated themselves to the preservation of peace. By the end of 1960 the world organization will probably number 100 members.

The new states of Africa, with their problems and tremendous potential, will unquestionably figure in the limelight of world affairs in the years ahead. Their accession to membership in the U. N. has a particular significance with respect to the ideological contest between East and West. For the first time in the 15-year history of the United Nations, the power of the majority vote in the General Assembly passes out of the hands of the Western states. The uncommitted nations, the so-called Afro-Asian bloc, now command enough votes in the General Assembly to wield the power of decision in the world organization. Every vote in the U. N. General Assembly carries equal weight, and the voice of awakened Africa is bound to be heard.

by Dave Karten, *Airman Staff*

TRADITIONALLY, the military has always sought to obtain the best talents for its officer corps. Today, the OCS, for enlisted airmen exclusively, is the USAF's way of permitting qualified airmen to earn a commission—and is producing a high percentage of competent and dedicated career officers.

For those who have the qualifications—outstanding traits of character, intelligence, and qualities of leadership, OCS offers one of the best opportunities for advancement and training.

But before they can earn the gold bars of a second lieutenant, the prospective Air Force officers must prove their worth.

"We put as much pressure on an airman here as we possibly can," explains Col. Charles J. Long III, commander of the USAF OCS. "We try to stretch him to his 'elastic limit' without making him crack. We must determine his limit. If it isn't far enough, he should be eliminated. We must know whether a man can get angry, rattled, tired, desperate, and still carry on. If he can't, he's no good to the Air Force."

"You airmen have come here because you want to become Air Force officers," a captain tells them. "If you really want to earn a commission and if you have what it takes, you're going to prove it every day for the next six months. We don't want anyone in OCS who doesn't want to be here. You can wash yourselves out anytime."

OCS

The Class System

The new officer candidate's first encounter with the traditions and customs of officer training is through the class system. All military training is conducted under the same class system employed at West Point, Annapolis, and the Air Force Academy. OCS has two classes in training at the same time; one senior to the other. The senior class is known as the "first class" and the junior class is the "second class." First classmen perform all the OCS officer duties. They are responsible for command of the wing. They indoctrinate and orient second classmen in rules, regulations, and customs of the Air Force. The commissioned Tactical Officers on the school staff act as the candidate's advisors. They counsel him on any difficulty he may encounter in the training.

The second classman's responsibility is to understudy the first classmen and develop a high degree of self-discipline. For three months he is subject to close, exacting, and rigorous supervision by the seniors.

"Bug, Mister!" The second classman must learn the almost impossible method of walking and running at the same time while at attention. He must square all corners when going from place to place. At the command: "Rock up, Mister!" he assumes the expression of Digger O'Dell and maintains an impassive Sphinx-like look.

He learns about "woollyboogers" (insects that live in dark corners and appear only during inspections); cables (pieces of string that protrude from the uniform and may vary in length from an eighth of an inch to several feet) and the "bunny suit," a two-piece garment that takes the place of a steam bath.

The officer candidate learns to stand stiffer and straighter than he ever has before. At the command: "Get on the wall, Mister!" he immediately places himself three inches off the nearest wall to undergo interrogation and personal inspection by upperclassmen.

"Sound off, Mister! What's your name? Where are you from?"

The second classman struggles to get the words up through his compressed throat.

"Why are you whispering, Mister?"

"No excuse, sir."

"When are you going to start thinking, Mister?"

After several tries, each new candidate learns to make himself heard. An authoritative voice is a necessity of command.

At every opportunity upperclassmen instruct each second classman. It's important that personal egotisms be subdued. Each man has to realize that he is starting from zero. He must develop a whole new philosophy of life. From the moment he arrives at OCS, every thought and action will be aimed at making him a well-disciplined Air Force officer.

The second classman discovers that even in the dining hall there is no relaxation. He may eat with the upperclassmen but must first request their permission to join the table as "tail gunner" or "honor guest announcer." He volunteers: "Are there any additional foods or beverages that I may obtain for you gentlemen?"

He sits at attention on the forward six inches of his chair. He keeps his head down and eyes glued to his tray. If he lifts them just once, an upperclassman will ask: "What are you looking at, Mister? You want to buy the place?" Eating in this position increases peripheral vision. Soon, each man at the table will be able to see what the table commander is eating without even looking at him. He eats with one hand and keeps the other in his lap when he is not using it. He learns

DDAY

to act with no waste motion, make every move count.

It doesn't take long for an officer candidate to realize that OCS is a man-sized game and that he must play strictly according to the rules. Everyone gets a copy of the OCS rules, regulations, and customs he or she will have to live by. It includes a copy of General Schofield's 149-word definition of discipline; George Washington's 57-word general order on profanity; Ulio's definition of courtesy; the Officer's Code; Hubbard's statement on loyalty; the self-evident truths of the Declaration of Independence; and the Officer's Oath of Office.

The new candidates have to learn their "memory work" and be prepared to quote all or any part of it to the upperclassmen upon request. This is to condition their memories for the numerous checklists that will be forthcoming later when they are Air Force officers.

Students are continually evaluated for their academic and military progress. The six-month course is a tough one. Before the grinding 24 weeks are over, about 25 percent of the candidates will have washed out.

The first few weeks of OCS present a difficult period of adjustment for airmen in the OCS program. Some candidates can't see any reason for the pressure placed upon them and immediately decide to resign. But the majority soon adjust to the rapid pace. They learn to respond promptly to upperclass instruction, walk at attention, memorize the required statements, sit at attention, and exercise self-discipline.

The class system has several advantages in transitioning airmen to officers. It enables the Tactical Officer, for example, to evaluate a first classman's ability to train second classmen. It also gives candidates the opportunity to apply the leadership principles they studied in the classroom. While the system puts the prospective officer under a great deal of pressure, it does not compromise his dignity.

Delinquency and Demerits

OCS standards of discipline are equal to the highest in the Air Force. Officer candidates at the school are required to present a superior military bearing and an immaculate appearance at all times. They must keep their rooms in a constant state of orderliness; conduct themselves in a dignified manner. The slightest deviation from these standards is a "deficiency."

The delinquency and demerit system helps evaluate and determine any deficiency and to correct it. When a candidate violates a regulation, or fails to conform to the established standards, he is considered delinquent and given demerits.

The candidate's demerit record indicates his military training, standing in conduct, and conformance to regulations. The penalty for excess demerits: restriction and a low rating by the Tactical Officer. Since discipline reflects leadership ability, the candidate's demerit record is most important in predicting his aptitude for future service as an Air Force officer. There is an axiom that you must know how to follow before you can lead.

During his first few weeks of training a candidate isn't permitted to leave the school area. As the training progresses he receives a few privileges: he may visit his family off-base on Saturday or Sunday afternoons. However, if a second classman hasn't progressed satisfactorily in his training, or has excessive demerits, he is restricted to the OCS area. Upperclassmen not on duty have off-base privileges from noon Saturday until Sunday evening.

The Honor System

Ever since OCS was founded at Miami Beach, Fla., in February 1942 it has had a strong and active honor system. Basis of the system, simply stated, is that an officer will not lie, cheat, steal, nor tolerate those who do.

The inflexible code of honor becomes a most important motivating factor in the OC's life. It directs every thought and move. No candidate would hesitate

to turn himself in for a breach of regulations, nor would he hesitate to turn in his best friend for a breach of honor, which means automatic expulsion. The honor system is administered by the officer candidates themselves through a Student Honor Council. Honor system violators are dealt with promptly.

How important is the honor system? "Without it," says Colonel Long, "we wouldn't be in business. Your word is your bond. You don't investigate a man's actions. You just ask him about them and you believe his answers."

Academic Training

In his 24 weeks at OCS, the officer candidate spends 360 hours in the classroom. The curriculum is not designed to replace a college education, nor is it a comprehensive science course. It is the fundamental professional education that is mandatory for a junior officer in the United States Air Force. The subjects taught are like avenues that lead to higher education. The academic program has two goals: to give each candidate the minimum professional education for a commission, and stimulate his interest for further self-development.

The curriculum is divided into four broad areas: Communicative Skills, The World, Aerospace Power, Air Force Officer. The subject matter in each of these areas is aimed at the development of a well-rounded officer.

Communicative Skills covers logical thinking, a review of English fundamentals, reading, writing, and public speaking. Each candidate has to be ready to speak for ten minutes—logically and confidently—on a subject of topical interest. Then he undergoes critique by his classmates.

The World course is an introductory geopolitical evaluation of the major nations of the world and their political philosophies, a review of American History, a study of the Constitution, and current world affairs.

In Aerospace Power the OC views the Air Force as a means of waging or deterring war. He studies the history of the Air Force from its toddling days with the Army Signal Corps to the position in the world it holds today. Emphasis is placed on the impact of new aerospace weapons and weapon systems of the "force in-being" and their influence on world affairs.

The three-part Air Force Officer course covers an officer's responsibilities as a leader and manager, military law, organization of the Air Force and its major air commands, and the functions of staff and command at the squadron level.

Military Training

Military training at OCS is designed to instill and develop in each candidate the skills, the attitudes, the behavior patterns, and the physical fitness desirable in an Air Force officer.

The class system—strict adherence to customs, emphasis on drill, ceremonies, and military bearing—are all designed to develop a candidate's poise, improve his self-confidence, and his proficiency.

The constant pressure imposed on him by the intense training program, the full schedule of activities, and the increased responsibilities are a real challenge, a test of his capacity to produce. They are also designed to develop in the prospective officer the emotional stability required of an Air Force officer.

"This entire military training," emphasizes Colonel Long, "together with some portions of our academic program, is planned so that it will foster within each officer candidate certain inward qualities which must be developed by the student himself. Our system of training encourages the candidate to think, act, and look like an officer, and do so in a positive manner."

The first class gives the second class military training, under the watchful eye of the Tactical Officers. The Officer Candidate Wing runs the show. By establishment of an Officer Candidate Wing, with the first class in command and staff positions, a means is provided for candidates to practice, develop, and demonstrate the leadership techniques they have been taught. The OCS Wing is staffed by upperclassmen who have demonstrated outstanding academic and military proficiency as second classmen.

The 236-hour military training program includes 98 hours of drill, ceremonies, and inspections, 14 hours of field leadership, 103 hours of physical training.

Drill training teaches the future officers discipline, the need for vested authority, cooperation, and teamwork. Proficiency on the drill field develops his confidence, poise, forcefulness, voice of command, timing,

Officer Candidate Virginia R. Bracy is pictured in class with fellow candidates at the Lackland AFB training center. Enlisted WAF are eligible.

Officer candidates "sound off" during the voicing command class. Proficiency on the drill field develops confidence, judgment, and forcefulness. At OCS the Air Force takes a searching look inside the man to measure his ability and character.

and judgment. Here, the Air Force takes a searching look into a man's character and learns important things about him.

Field leadership covers practical problem-solving situations, development of physical self-confidence, and weapons familiarization. All male candidates must qualify as marksmen with the .45 caliber pistol.

The physical training consists of 30 minutes of body building exercises and two hours of competitive sports —basketball, softball, volleyball, and flickerball—five days a week. Each candidate's progress is recorded in four physical fitness tests during the six-month training period. An award is given to the candidate demonstrating best all around physical fitness and ability.

The Long Day

Throughout the six-month OCS countdown, candidates are on a rigorous schedule every minute of the day. Ask any second classman when he can find time to talk to you, and he'll tell you that budgeting your time is the secret of success in Officer Candidate School.

On the six working days of the week, he has reveille at 0520 hours, followed by 30 minutes of calisthenics. He then returns to his squadron for 45 minutes of personal and room clean-up. (Lower classmen clean the hallways, latrines, etc.) After the breakfast formation he is in the academic classroom four to five hours daily.

The afternoon schedule calls for physical training or competitive sports, drill, student activities or military ceremonies, and marksmanship training during the third month.

From 1615 to 1700 the candidate is busy cleaning up for the evening meal, standing formations or inspections directed by the upper class, or policing the area.

Personal time, the three hours between 1830 and Taps at 2130, is reserved for studying the next day's assignments and preparation of uniforms, shoes, etc., so that the OC can maintain the immaculate appearance which the school standards prescribe.

But OCS isn't *all* grind. There is a Student Activities Program conducted during prescribed periods each week where OCs can display their talents in the Glee Club, Drama Group, Electronics Club, or the Drum and Bugle Corps. Here again, student leadership is encouraged with faculty members as advisors.

There is a social program: club night every Friday and squadron party dances on Saturday nights (when you're not "demerited in"). Social activities, climaxed every 90 days by a series of functions during Graduation Week, are held in the student-operated open mess.

An active Chaplain's Program requires students to attend services of their preference during the first 16 weeks of training and offers religious counseling and guidance.

The cultural part of the OCS curriculum is aimed at intellectual and spiritual development of the officer candidate through formal lectures and character development patterns woven through the entire fabric of

After the fourth week of training at OCS candidates are permitted to spend weekends with families.

the program. His study of the Honor Code, the Serviceman's Code of Conduct, the officer's standard of personnel responsibility, and the ethical and moral standards of officers serve to introduce the OC to the principles of duty, honor, and country.

The Worm Turns

Midway in the training, the new candidate completes his 12 weeks as a lower classman. After a week's leave (to get over the shock), he bursts into the new field of the upperclassman. Now he tells lower classmen to "Cage those eyeballs, Mister!" (stare straight ahead and look at "nothing"). But now the new upperclassman finds that a new type of pressure has developed. Instead of being evaluated solely on his ability to absorb, the new upperclassman finds himself being evaluated on his leadership ability as well. Those who have been elevated to OC commissioned status begin to get actual experience in leadership and staff work.

On "Recognition Day" walking at attention, squaring corners, and "bugging" down hallways and sidewalks become things of the past for lowerclassmen. On that important day both classes face each other on the ramp. The commands are given: "First class, present arms! Second class, present arms! Graduating class, order arms!" The second classmen march to the club and are dismissed. They then call the gentlemen of the graduating class Lieutenant for the first time. They are proud of those who have gone before them; they feel the full weight of their responsibility as upperclassmen.

At graduation the six-month countdown is over. The speaker always concludes with "Godspeed!" The officer candidate rises to take his oath. Then the speaker and the commanders leave the dais. From a hundred throats comes a cheer. It signifies relief from the pressure of the past six months and entry into a new career in the United States Air Force.

Since 80 percent of the officer candidates are married men, no story about OCS would be complete without the real heroine of the drama—his wife.

About one-third of the OCS candidates have their families established in the vicinity of Lackland by the time they report to the school. Another third use the week's vacation at the completion of second-class training to establish their families in the area. A scattered few families trickle in to the Lackland area at other times during the course.

The OCS wives find themselves isolated almost entirely during the week. But after the first month, their husbands are usually able to spend a fair portion of their weekends with them. There are also a few times during each week—after the weekly OC Wives' Club meeting and after choir practice—when luck may permit them a half hour's chat with their husbands.

The OC wife usually finds that her husband can give her very little help with domestic problems or with the children during his training. "Nevertheless," explained one candidate's wife, "I feel that my presence is a help to my husband's morale. The work that I can do on his uniforms saves him precious minutes in his crowded daily schedule. I feel that the associations I am making here may last throughout my husband's Air Force career. And I expect that what I've learned about parties, receiving lines, and Wives' Clubs may make my next assignment that much easier."

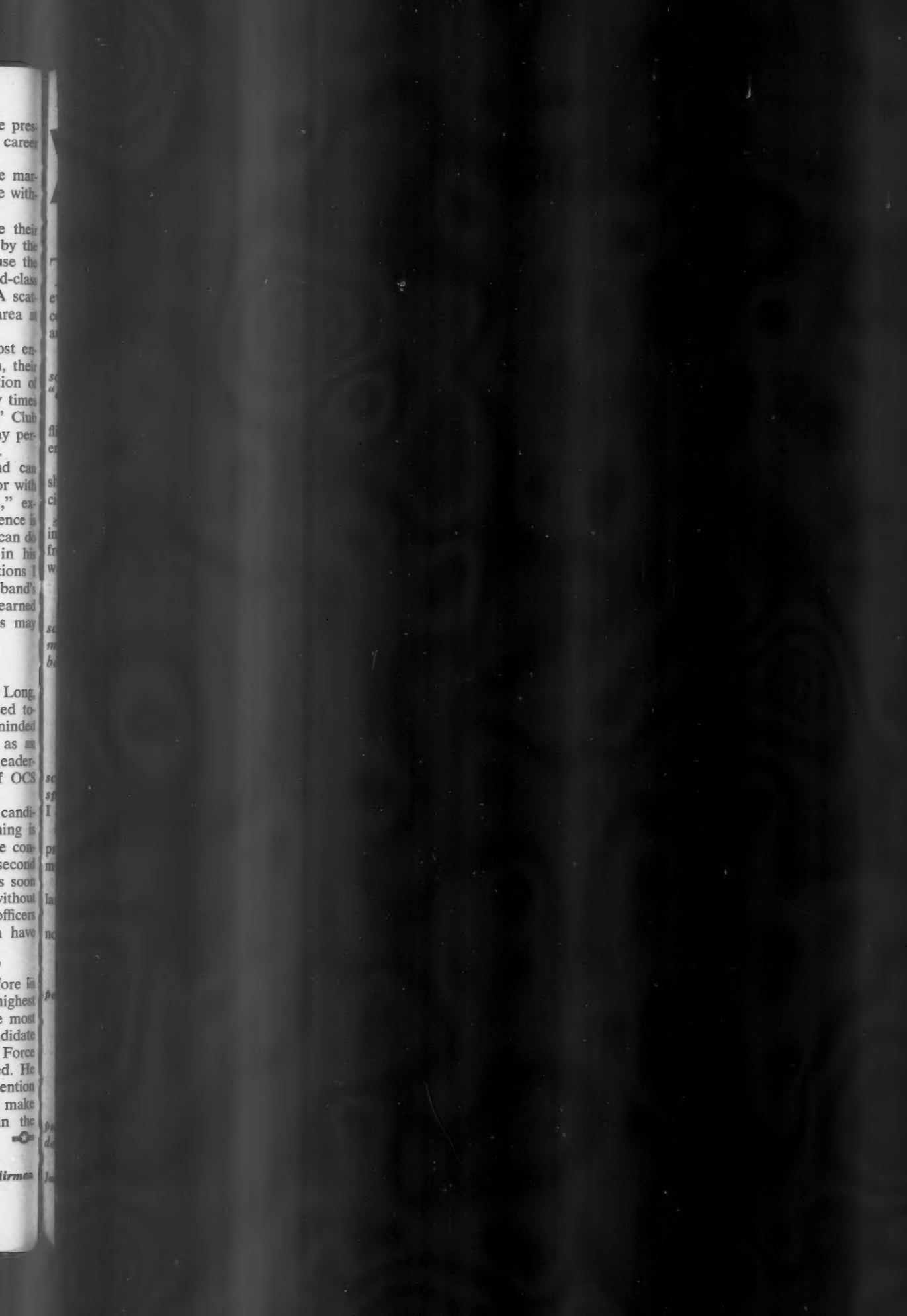
The End Product?

"In the short space of 24 weeks," says Colonel Long, "study, discipline, and physical effort are blended together. The end product is a dedicated, career-minded airman who has developed leadership qualities as an Air Force officer. We believe that the heart of leadership is integrity and in the short six months of OCS we continually emphasize personal integrity.

"We also attempt to get across to the officer candidates that although graduation and commissioning is the goal they had in mind when they arrived, we consider this only a part of their training. The second phase of training is to obtain a college degree as soon as possible after commissioning. We feel that without a degree they will be unable to compete with officers commissioned from other sources, all of whom have college degrees."

Is the Officer Candidate School doing all this?

Colonel Long says, "Yes. More than ever before in its history the Air Force needs leaders of the highest caliber. And today's OCS graduate is one of the most dedicated officers in the USAF. The average candidate already has five to six years' service in the Air Force before he comes to OCS. He is highly motivated. He intends to make the Air Force his career. His retention rate is a high 95 percent. He can be expected to make a real contribution to our nation's security in the Aerospace Age."



W
A

THI
m
every
correc
answe

1.
scribi
"effec

a.
flict s
enemy

b.
should
cient

c.
in suf
free n
wars

d.

2.
scribi
most
ballis

a.
b.
c.
d.

3.
scribi
space
I *and*

a.
projec
minist

b.
launch

c.
nothin

d.

4.
pertai

a.
b.
c.
d.
e.

5.
purpo
devel

Januar

WHAT DO *YOU* KNOW ABOUT THE AIR FORCE?

THE following questions cover important policies, missions, and concepts of the Air Force which everyone should know. How many can you answer correctly? Only one answer per question. For correct answers see page 36.

1. Which of the following comes closest to describing what the Air Force means by the term, "effective deterrence"?

a. Possession of military strength which could inflict such severe and unacceptable destruction on an enemy that he would not risk starting a war.

b. Possession of military forces to deter war, and should war occur, to have the military strength sufficient to defeat the enemy.

c. Possession of nuclear and non-nuclear weapons in sufficient quantities to enable the U. S. and other free nations of the world to prevent outbreaks of small wars which could lead to a general war.

d. Don't know.

2. Which of the following comes closest to describing the Air Force's opinion regarding the most effective time to intercept enemy strategic ballistic missiles? During:

a. Final stage of flight.
b. Mid-course phase.
c. Boost phase.
d. Don't know.

3. Which of the following comes closest to describing the Air Force's responsibility in the U. S. space research success this summer with the Echo I *and the* Discoverer *satellite projects?*

a. USAF had nothing to do with them as they were projects of the National Aeronautics and Space Administration (NASA).

b. USAF provided the missile boosters which launched both satellites into orbit.

c. USAF assisted NASA with *Discoverer* but had nothing to do with *Echo 1.*

d. Don't know.

4. Which one of the following combinations pertains most closely to ballistic missile warning?

a. *Tiros*-SAGE.
b. SAGE-Dew line.
c. *Midas*-BMEWS.
d. *Samos-Transit.*
e. Don't know.

5. Which of the following best describes the purpose of the Dyna-Soar, *a research vehicle being developed by USAF?*

a. To take a man into orbit and return him to earth in a capsule ejected from the spacecraft.

b. To carry a pilot into orbit around the earth and return for a controlled landing in the spacecraft.

c. To train *Project Mercury* pilots for their flight into space.

d. Don't know.

6. Which one of the following is an advanced space reconnaissance system?

a. *Scout.*
b. *Midas.*
c. *Samos.*
d. *Courier.*
e. Don't know.

7. Which of the following comes closest to describing the procedure adopted by the Air Force for screening rated officers who have been identified for possible removal from flying status to meet the ceiling on rated officers imposed by Congress in the Appropriations Act of 1961?

a. "Flying Potential" concept—analysis of the individual's future capability to serve the Air Force in assignments requiring flight duty.

b. "Whole Man" concept—an overall analysis of past duty performance, educational background, specialized training, retainability and value to the Air Force including his rated specialty.

c. "Flight Background" concept—an analysis of the individual as a rated officer, what he has accomplished in past flying assignments, how well he has kept up his flying techniques, and his value to the Air Force in his rated specialty.

d. Don't know.

8. "Selective retention" is an important feature in the long-range planning of the Air Force for the 55/45 balanced airman force. Which of the following comes closest to describing what the Air Force will do in using selective retention?

Select outstanding airmen for:
a. Promotion.
b. Retention.
Or, reenlist only those airmen who have:
c. High aptitude scores and above average ratings.
d. Skills needed to meet Air Force requirements.
e. Don't know.

9. In operating the nation's airlift force, MATS reports directly to:

a. Chief of staff, USAF.
b. Joint chiefs of staff.

c. Asst secy (Supply & Logistics) DOD.
d. The individual services.
e. Don't know.

10. Which of the following comes closest to describing the Air Force position on the organization of the Department of Defense?

a. The present defense establishment is organized adequately to meet the nation's security needs.
b. The Air Force supports measures leading to further unification of the total defense establishment.
c. Nuclear-missile-space developments require further unification of the strategic forces only.
d. Nuclear-missile-space developments require as soon as possible a single unified service with all servicemen wearing the same uniform.
e. Don't know.

11. Which of the following statements comes closest to describing the Air Force's position regarding the nation's basic military objectives?

a. To deter aggression, and if deterrence fails, to prevail by capability to destroy enemy military forces.
b. To keep the peace by making the consequences of aggressive action unacceptable to the aggressor by capability to destroy enemy urban and industrial targets.
c. To keep the peace mainly through non-military courses of action (e.g. United Nations, economic measures), with U. S. military strength adjusted to serve the current security needs of the country.
d. Don't know.

12. Suppose nuclear weapons were outlawed. Which of the following best describes, in your opinion, the effect this action would have on the U. S. military strength needed to stop the communists from using force to take over free nations of the world?

a. Present non-nuclear weapons could be used almost as effectively as nuclear weapons.
b. It would be necessary to increase by large numbers the men and weapon systems available to the U. S. Armed Forces.
c. There would be actually less need for non-nuclear weapons as the communists would become less aggressive.

HAPPY NEW YEAR -- BUT WHEN?

Throughout most of the world the stroke of midnight on the last day of December ushers in New Year's Day, 1961, A. D. The occasion is significant not only for celebrating individuals but also as the widely accepted first date of another year for commercial, governmental, diplomatic, and other practical purposes.

It happens, however, there are several other New Year's Days coming up in the months ahead and with one exception they do not mark the start of 1961.

In westernized Japan, it is true, the day after December 31, 1960, will show on calendars the same as ours. The same date, however, marks the advent of the year 2621, which is computed from the legendary founding of the nation by the Sun Goddess in 660 B. C. Or, if you prefer it opens the 36th year of *Showa*, the Japanese word hopefully chosen by Hirohito as characterizing his coming reign when he became Emperor in 1925. A free English translation of its full sense would be something like: A Period of Shining Peace.

Come spring, and India's long established turn to hail a special New Year falls on March 22 which is the first day of 1883 in the Saka Era, computed from the probable start in 78 A. D. of the Saka Line of Rulers who figure in the early recorded history of much of the great subcontinent.

For Islam, June 15 means the arrival of the year 1381. The date commemorates that of the flight—or hegira—of the prophet, Mohammed in 622 from Mecca to Medina where the Mohammedan era is considered formally to have begun.

For Orthodox Jews the next New Year arrives September 11 when it will be 5722 A. M. The initials stand for the Year of the Earth, as expressed in the Latin, Anno Mundi. This reference is to the account of when the earth and its creatures were made, as related in the Old Testament's Book of Genesis.

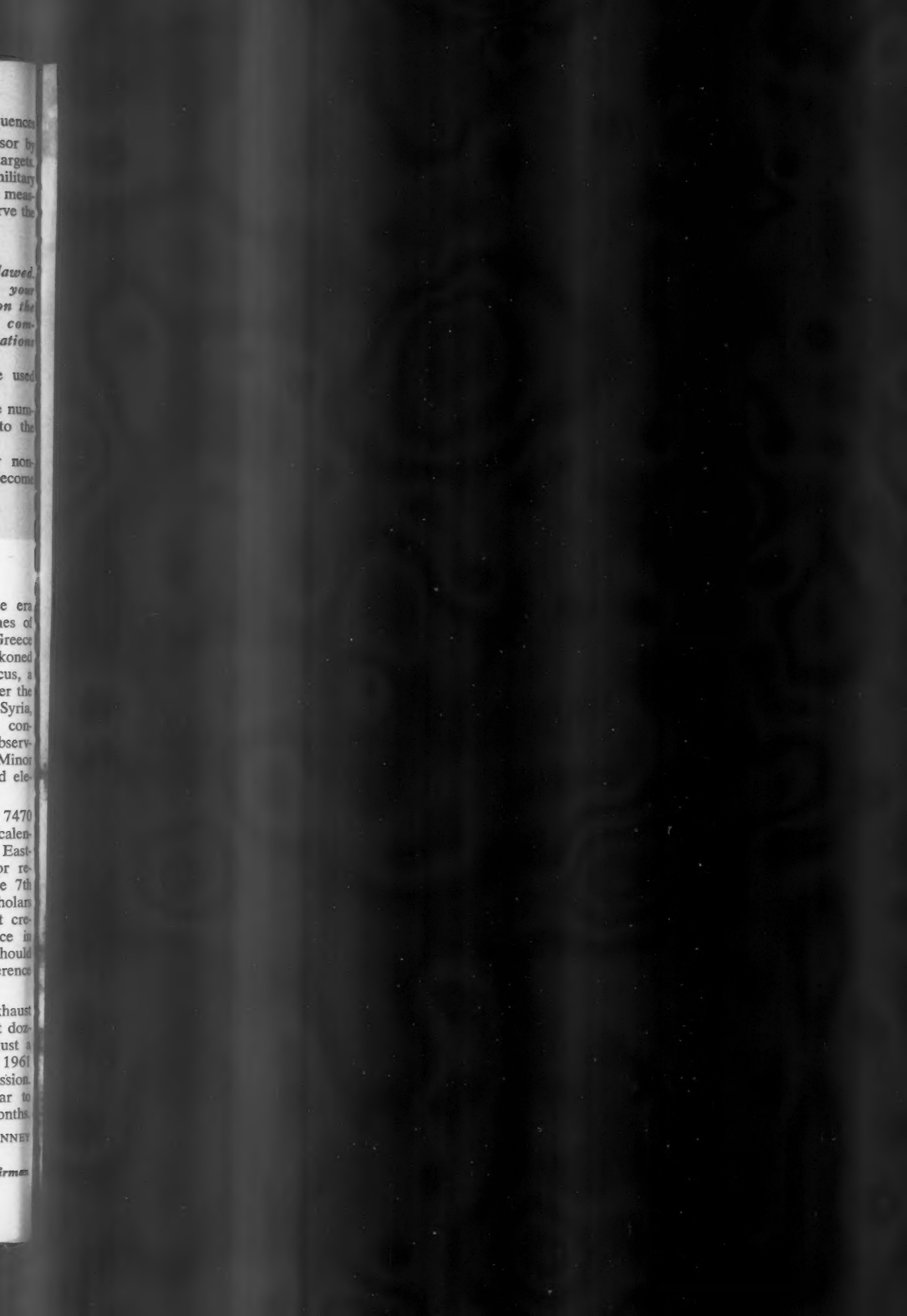
On the same day the year of 1678 begins according to the Diocletian calendar which is computed from the completion of a great triumph achieved by the Roman Emperor Diocletian over Chaldea in 284.

Another New Year—2273—is due on September 14 in the era which traces back to the times of the dominance of ancient Greece and its allies. The date is reckoned from 312 B. C., when Seleucus, a military lieutenant of Alexander the Great and sovereign of Syria, brought Babylonia under his control. It has had a long past observance in the Western Asia Minor area and also among scattered elements of Jewry.

September 14 also ushers in 7470 of the Byzantine Era whose calendar is still widely used in the Eastern Church. This formula for recording time originated in the 7th century A. D. when some scholars arrived at the conclusion that creation of the earth took place in 5508 B. C. and this event should be the point of original reference in human affairs.

This run-down does not exhaust all the new years that the next dozen months will bring; it is just a reminder that January 1, 1961 A. D. only starts the procession. Meanwhile, Happy New Year to all across the board and the months.

—WILLIAM A. KINNEY



MEMORABLE EVENTS OF 1960

If you are a little tired, you have a right to be. 1960 was a busy year for the Air Force. But rest quickly—'61 will be even busier!

The first year of a decade widely held to be fraught both with danger and great promise was hardly a week old when it began to live up to expectations. The USAF, pausing only briefly to note 1960's arrival, blasted it on its eventful way January 6 with the first *Atlas* firing of the year. The ICBM's thundering engines were merely a prelude to the amazing 12-month story about to unfold.

Before it became history—which wouldn't happen until a month after this writing—speed and altitude records would fall, new satellites would circle the globe, new missiles would leap from drawing boards and launch pads, giant transports would fly to the aid of disaster-stricken countries, and the seeds of a new era in science and technology would poke their first timorous growth into the stream of world events.

But even more important than all of this, 1960—despite the numerous crises which at times placed destiny in doubt—would go down as another year in which the deterrent might of the Free World continued to maintain the peace with justice, honor, and dignity.

THE MANNED AND THE UNMANNED

WEAPON SYSTEMS, manned and unmanned, st spec
the additional tools and material with wh t of *A*
the Air Force does its job, bolstered the nati The ver
overall deterrent strength through continuing plest,
provements and developments. le ICB

Early in January the *Thor* test program cam launch
an end. Before the month was over Britain's R s were
Air Force successfully launched its 11th *Thor* IR pellant
from Vandenberg AFB. This marked the com us.
tion of the crew-training program, which in Time a
months had seen more than 1,100 missile stud ry. On
from England complete the SAC course on the T BM en
But the same month, a new series of tests beg sful se
Cape Canaveral, to explore the uses of the *Tho* ine at
civilian scientific programs. ond st

Meanwhile, on January 26, members of SA the
576th Strategic Missile Squadron completed bruary
second operational training launch of an A wn the
ICBM. The same day the Air Force announced ies of
new support bases for four additional *Atlas* sq -syste
rons. The selection of Altus AFB, Okla., D sule v
AFB, Tex., Walker AFB, N. Mex., and Plattsb nt 5,0
AFB, N. Y., brought to 13 the number of A ht ran
squadrons and to 11 the number of support b in wh
for the missile. At the same time, the flight-test Missile
gram was proceeding with a high degree of suc nth of

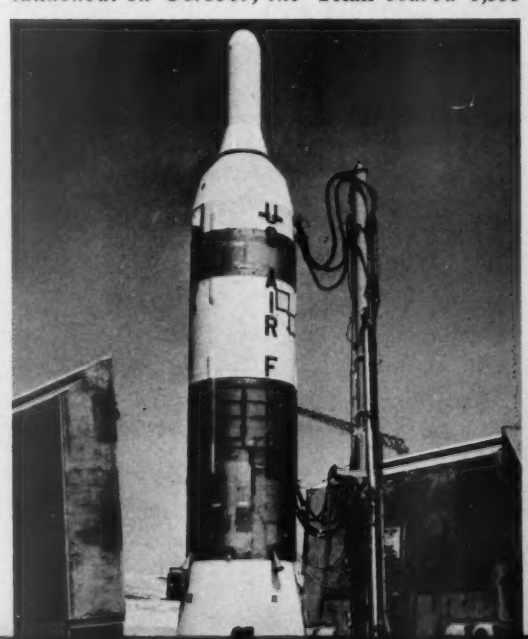
Now operational, the Atlas *is elevated to firing position in its launcher at Frances E. Warren AFB, Wyo.*

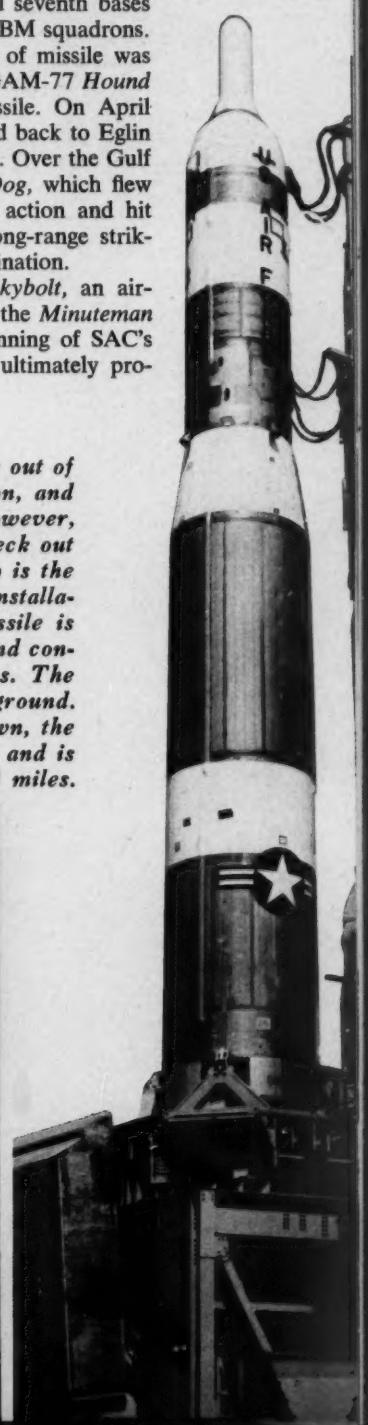
...nned, ...t specific accomplishment being the 9,000-mile ...with ...ht of *Atlas* on May 20 at Cape Canaveral.
...e nati... The very next day, the nation's newest, smallest, ...inuing ...plest, cheapest, least vulnerable and most ver... ...ile ICBM, the *Minuteman,* completed the fifth ...m cam... launching at Edwards AFB, Calif. All test objec... ...ain's R... ...s were achieved moving America's first solid... ...*hor* IR... ...pellant, three-stage ICBM closer to operational ...e com... ...tus.
...ich in Time and missile development raced into Feb... ...le stud... ...ry. On the second day of that month, the *Titan* ...n the T... ...BM entered advanced flight testing with the suc... ...s bega... ...sful separation and ignition of the second-stage ...he *Thr*... ...ine at altitude for the first time. It was the largest ...ond stage the Free World ever ignited at altitude, ...of S... ...the *Titan* was not to rest on its laurels. On ...pleted ...bruary 24, a *Titan* traveled a full 5,000 miles ...an ...wn the Atlantic Missile Range in the first of a ...unced ...ies of extended range flights to test all its major ...*tlas* sq... ...-systems. Everything worked perfectly. The data ...kla., D... ...sule was recovered. In March the *Titan* again ...Plattsb... ...nt 5,000 miles and on October 24 increased this ...r of A... ...ht range by 1,000 miles in a highly successful ...pport b... ...t in which the nose cone was again recovered.
...ht-test ... Missile developments highlighted nearly every ...of suc... ...nth of 1960. In March, the last 60 *Thors* required to complete the ballistic missile armament at the four *Thor* bases in England left California. Some 20 million pounds of *Thor* ground-support equipment had been flown in 500 plane loads from California to England. Malmstrom AFB in Montana was named as the support base for the initial operational deployment of the *Minuteman,* and each of the three squadrons programmed for that base will be in underground silos. Later, in April, Davis-Monthan AFB, Ariz., and McConnell AFB, near Wichita, Kans., became the sixth and seventh bases named to provide support to *Titan* ICBM squadrons.

That same month a different kind of missile was successfully checked out. It was the GAM-77 *Hound Dog,* a supersonic air-to-surface missile. On April 12, a B-52 flew to the North Pole and back to Eglin AFB, Fla., a distance of 10,800 miles. Over the Gulf Testing Range, it fired the *Hound Dog,* which flew several hundred miles, took evasive action and hit the target, thus demonstrating the long-range striking power of a bomber-missile combination.

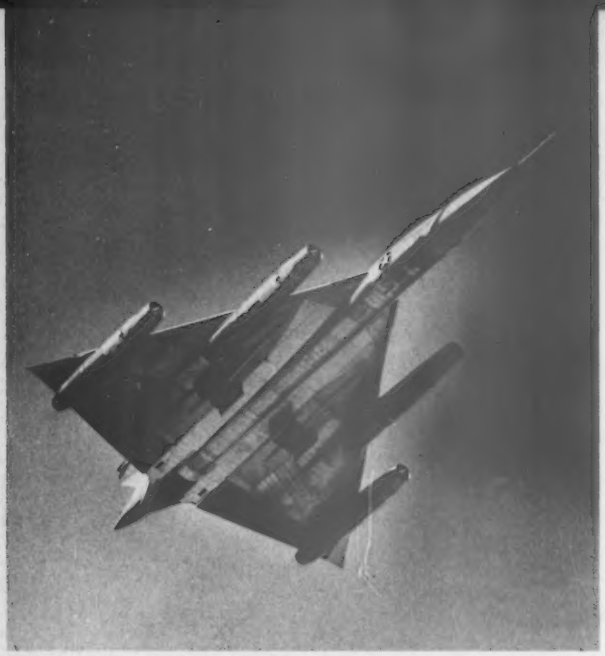
1960 also saw the approval of *Skybolt,* an air-launched ballistic missile, the end of the *Minuteman* silo compatability tests and the beginning of SAC's railroad testing program which will ultimately provide mobile bases for *Minuteman.*

...ahead
...he B-70 Valkyrie
... give the Air Force
...ach 3 bomber
... can use runways
...sently accommodating SAC B-52s.





At Vandenberg AFB, Calif., a **Titan** ***(l) noses out of its underground silo, (c) nears firing position, and (r) stands ready for launch. This*** **Titan,** ***however, will not be fired. It is a test model used to check out equipment and installation facilities. This silo is the progenitor of all*** **Titan** ***ICBM underground installations being built around the nation. The missile is protected from possible destruction by steel and concrete doors weighing approximately 200 tons. The*** **Titan** ***is prepared for launch while underground. During the last few minutes of the countdown, the doors open, the missile rises to ground level, and is launched. In October, the*** **Titan** ***soared 6,000 miles.***



The B-58 Hustler

The F-104 Starfighter
is being modified for pilotless operation.
Drone models will test air defense systems.

A B-52 roars off
with a Hound Dog *missile tucked under each wing.*

The Manned Systems

As the unmanned weapons which will lead us through the unsteady 60s poked their nose cones through aerospace, the manned systems also took on new power. At mid-year, SAC's 43rd Bomb Wing accepted the first Mach 2 B-58 *Hustlers.*

Approval was attained for the development of the B-70 *Valkyrie,* a Mach 3 vehicle with a versatile capability. SAC put into service flying command posts which could take over command and control of all units in the event the underground post was put out of action. And the reliable B-52 gained new power through an engine modification that boosted its speed and range.

In September, TAC formally accepted the Republic F-105D *Thunderchief,* the newest all-weather version of the tactical fighter that holds the world's 100-kilometer closed course speed record. The 1,400-mile-an-hour fighter, capable of carrying nuclear weapons both internally and externally—and non-nuclear weapons externally—has been described as a "reusable guided missile."

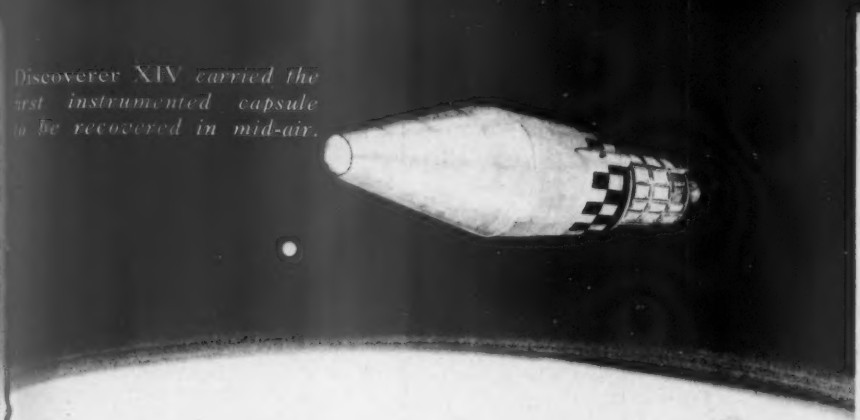
Manned systems without the men took a paradoxical step forward during the year. Air Force crews at Eglin AFB began flight testing F-104s, 24 of which are being modified to fly without pilots. The manned *Starfighter* is the only fighter ever to hold the world's speed and altitude records at the same time. (1,404.19 m.p.h. and 91,249 feet.) The remote control models are the first century-series fighters ever to be "droned" and they will be used to test the nation's air missile defense system.

In August, a QB-47 took off from Eglin AFB with nobody on board. It flew, controlled from the ground, down the Gulf Test Range, circled back at 35,000 feet and began a "bombing run." At a SAGE center in Montgomery, Ala., the QB-47 was tracked. A controller pushed a button. Miles away on the Gulf Coast, a *Bomarc* roared from its pad, scored a programmed near miss, and the Air Force acquired a new "drone" to simulate attacking enemy bombers and exercise its air defense system.

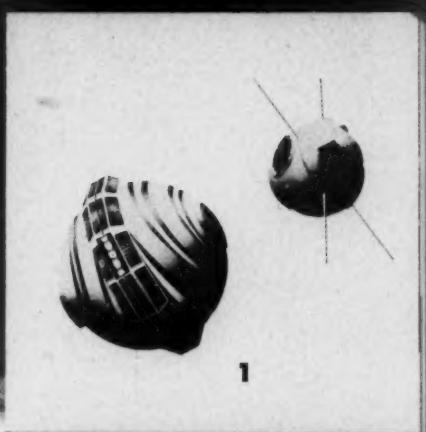
But in the realm of air defense, no development could match in importance the first signals that sped southward from the Ballistic Missile Early Warning System (BMEWS) site at Thule, Greenland. On the 30th of September, the Free World's first missile warning radar station became operational, completing the initial step toward the complete system to warn of an attack by ICBMs.

These first test signals activated special displays in the NORAD Combat Operations Center, and gave the battle staff its first look at alert signals that simulated the real thing.

An era ended in 1960, too. At Naha Base on Okinawa, the last four B-29 *Superfortresses* were retired from active duty. The B-29 made its maiden flight in September, 1942. Fifteen years ago nearly 4,000 filled the skies between the Mariannas Islands and Japan. It is fitting that the last of these old warhorses be laid to rest in the area where they saw their finest hours.



Discoverer XIV carried the first instrumented capsule to be recovered in mid-air.



1

SPARTAN STRIDES TO SPACE

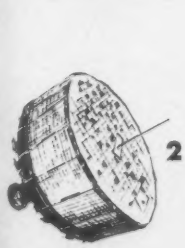
If the world has a collective stiff neck this New Year's Day, it will probably be from watching U. S. satellites. The year of '60 was a big one, and the impressive list of successes represent in most part the joint coordinated efforts of industry, the armed forces, and NASA.

Of 25 attempted satellite launchings (as of December 7) 15 were successfully placed in orbit. Two long-range space probes were attempted, one of which was successful.

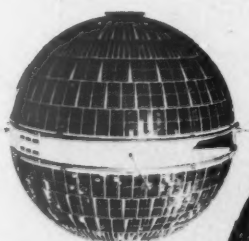
The Russians, too, were busy with satellites. No accounting is available on the number of attempts the USSR made, but they did succeed, during 1960, in getting three satellites in orbit.

There were other significant strides on the road to space exploration and the USAF figured prominently in several of them. When Capt. Harold E. Mitchell's *Pelican Nine* C-119 snagged the space capsule parachuting back to earth from orbital flight of *Discoverer XIV* last August, it was a historical first. Its significance lies in the fact that a new concept in aerial recovery of space capsules was proved possible; a feat of prime importance in putting a man into space. It was the first ever to be air-recovered from outer space.

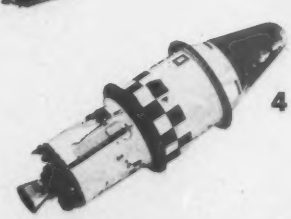
Air Force **Thor** ***and*** **Atlas** ***missiles were primary instruments used for propulsion of satellites such as (1)*** **Transit** ***(top right), (2)*** **Tiros,** ***(3) communications satellite the*** **Courier,** ***(4)*** **Midas,** ***and (5)*** **Echo.**



2

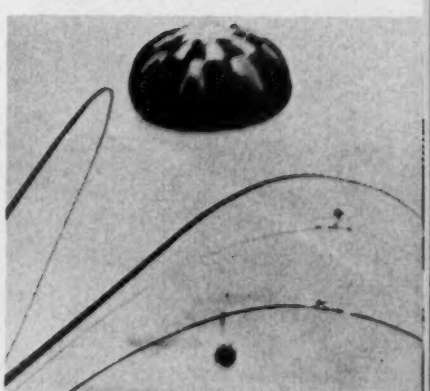


3



4

5



Discoverer *capsule was snagged in mid-air*

OPERATIONS GLOBAL AND VARIED

The USAF's operational muscles got plenty of exercise during the year. Combat aircraft shadow-boxed imaginary opponents in realistic war games. Global hops by Composite Air Strike Forces demonstrated TAC's swift and stunning left jab. SAC's aircraft continued the relentless, simulated bombing of American cities in globe-girdling flights. And the aerospace might of the USAF turned at times from flexing its wartime muscles to extending its sinewed, friendly hand to people stricken by disaster.

In January, the Air Force announced a unique role for the deadly F-106 *Delta Darts* of the Air Defense Command. They were to fight an unusual enemy—avalanches of snow which in Glacier National Park annually claim a toll of lives. Flying at speeds of 750 m.p.h., the fighter-interceptors created sonic booms which dislodged the heavy accumulations of snow in controlled avalanches.

In March, a devastating earthquake reduced to rubble Morocco's resort city of Agadir. Aid from American armed forces was prompt, and within hours USAFE's 322d Air Division (Combat Cargo) began moving a total of more than two million pounds of supplies and equipment, and more than 300 men to the area.

Less than two months later, Chile was rocked by a series of quakes and tidal waves which left thousands homeless. Again the American response was immediate. In *Amigos Airlift,* transport aircraft stationed in the U. S. and Panama began moving to Chile.

More than 750 tons of food, clothing, medical supplies, and equipment were airlifted in 68 missions by MATS aircraft. Some 670 military personnel of the U. S. Armed Forces were sent to the area.

The first field maneuver in which ground and air units of South American republics participated with U. S. forces took place in March. It was exercise *Banyan Tree,* conducted in March. Involving about 5,000 men and 150 aircraft, the exercise was designed to study the defense problems of the Panama Canal.

The same month, exercise *Big Slam/Puerto Pine* put the USAF's strategic airlift capability to the test. MATS carried 21,000 Army troops and 10,925 tons of equipment to Puerto Rico and back to the U. S.

In the joint Army and Air Force exercise *Bright Star/Pine Cone III,* conducted in late August, USAF aircraft logged 12,000 flying hours without incident. AF Reserve, ANG, TAC, and MATS aircraft flew some 1,849 "combat" sorties and more than 2,594 support sorties. This was the largest peacetime airborne maneuver ever conducted by the United States.

On the 10th of September, there was *Operation Sky Shield.* All commercial flying in the United States and Canada ceased while the units of NORAD exercised the air defense system of the entire North American continent.

And approximately a month later, the radar network which guards North America took on another vital job. NORAD announced that henceforth the nation's warning system would be used for civilian air traffic control, a complex operation requiring two years of study and preparation. In some 50 radar sites across the country, Federal Aviation Agency controllers now monitor the progress of civilian aircraft on remote scopes of the same radar used by USAF personnel to track military aircraft and guard against surprise air attack.

October also marked the beginning of faster transportation for DOD passengers enroute to Europe. Jet air travel using TWA Boeing 707-331 jet aircraft was inaugurated with approximately 47 trips scheduled for the remainder of 1960. Enroute time is roughly seven and a half hours.

AIRMEN AT WORK

Thousands of airmen who made the achievements of 1960 possible will never hear their praises publicly sung. The few who by virtue of training, opportunity or sheer happenstance rise to public notice symbolize the devoted efforts of the entire Air Force team. There were such people in 1960—there was A1C Bruce Barwise who spent 72 hours in the frigid waters of Lake Michigan confined in an escape capsule designed for a B-58. He showed how a man reacts to such problems as cold, seasickness, loneliness and an unnatural environment.

For 12 airmen and 17 civilian scientists, the new year's arrival was heralded by the destruction of their "home." Since May 1959 they had been performing research on an ice floe called Drift Station C. On January 7, because of sudden and intense ice movements of the Arctic pack, their ice floe broke up. Alaskan Air Command evacuated them with ski-equipped C-130 and C-123 aircraft.

Then there was MSgt. George (Pop) Hunt who decided that as the oldest man in the Air Force, he had done his duty. He quietly retired in Austin, Tex., at a vigorous 72 years of age. His career began in 1915 the same year Dwight Eisenhower, with whom he later served, graduated from West Point.

Pop Hunt retired in August. About three weeks earlier, as though to emphasize the phenomenal strides of technology during the span of this man's career, Maj. Robert White climbed into a black, stubby-winged aircraft called the X-15, and set a new world altitude record of 136,500 feet. About two weeks before that NASA test pilot Joe Walker flew the same winged rocket at a record-breaking 2,196 miles per hour—Mach 3.31.

August was a big month. On the 16th, Capt. Joe Kittinger, Jr. broke a record coming down instead of going up. From the gondola of a balloon soaring 102,800 feet over New Mexico, he parachuted to earth roughly 19 miles below.

Capt. Herbert I. Mattox, Jr. received the Cheney Award for a helicopter air rescue mission of the crew of a wrecked Japanese trawler near Okinawa, and the Thunderbirds, USAF's flying demonstration team, were awarded the Mackay Trophy for meritorious flight.

There were many other individual awards, accomplishments, and achievements. As older men passed through the doors of retirement, their moments of glory and years of service behind them, thousands of others opened the first door of an Air Force career. Among these new men—basics from Lackland, officers from the Academy, ROTC, and other sources—are the records of future years, the seeds of tomorrow's Air Force, and the destiny of the future.

Helping hands assist Kittinger in removing pressurized suit after highest altitude drop in history.

Maj. Robert White set world's record in X-15.

TSgts. Henderson (l) and Clark spent 14 days in a simulated space capsule at Brooks AFB.

Long flights of many hours duration are regular routine for USAF aircrew members all over the world. But sometimes when the weather is good and the aircraft is humming along like a sewing machine, time hangs heavy on the airman's hands. What does a man think about as he waits through the long hours while the miles are steadily washed away into the slipstream?

CONGO TRIP 227

Photos by SSgt. Don Moore

by Capt. Jim Taylor, *1602d Air Transport Wing*

IN THE early morning of September 23 Major Hiram Griffin lifted aircraft number 1026 from the runway at Chateauroux, France, and flight 227 for the Congo was airborne.

For perhaps an hour after the Globemaster *pointed its nose south toward Italy the tingle of excitement always associated with takeoff remained to charge the atmosphere with a faint, pleasant electricity. But as the pilot and his eight-man crew settled down for the journey ahead, the patches of silence grew gradually longer. Each man in turn shut himself apart in the privacy of his thoughts.*

Some closed their eyes in search of sleep; others smoked, or stared with casual interest at tiny patchwork fields, toy villages, and miniature silver rivers far below. And like curling wisps of invisible smoke, each man's thoughts floated lazily—suspended for a moment in mid-air before dissipating slowly to vanish away.

This is the 227th *Globemaster* flight to the Congo since the U. N. airlift started back in July. There's a long ride ahead, but it should be a breeze. Of the 226 flights that have gone before, not one has met with an accident of any kind. Unless you want to count the time one MATS crew was roughed-up by a mob in Stanleyville. That was a rugged bit, but it's not likely to happen again. At least let's hope not.

This Major Griffin up front is an old-timer with MATS. He's making the Congo run for the first time but there's no sweat. Fifteen years is a lot of flying experience. Besides, the bird colonel in the right-hand seat knows these routes like the palm of his hand. Name is Steinle, Col. Paul J. Steinle, Deputy Commander of the 1602d Air Transport Wing. He keeps his finger on things by flying as a crew member on MATS flights out of Chateauroux. They say he pioneered the routes to the Congo when the U. N. operation first

opened up. Seems the maps they had in the beginning showed mountains where there were no mountains and marked others in the wrong places.

The Globemaster *crossed the toe of Italy with the sun glistening on the Mediterranean. The shoreline with its toothpaste ribbon of white water breaking on the beaches looked like a picture postcard. Ahead lay empty miles of sky and sea as the aircraft left land behind on a heading for Cairo. Navigator Lt. Richard Crowley yawned, stretched, and looked back at the radar.*

We'll turn on a new heading at Cairo to line up for Dhahran. That's first stop and crew rest. Not many of these Congo trips have taken the roundabout route of this one. Some few covered more miles, like the flights from Chateauroux to Leopoldville by way of New Delhi. But this one should be interesting. We'll log nearly 14,000 miles before seeing home base again.

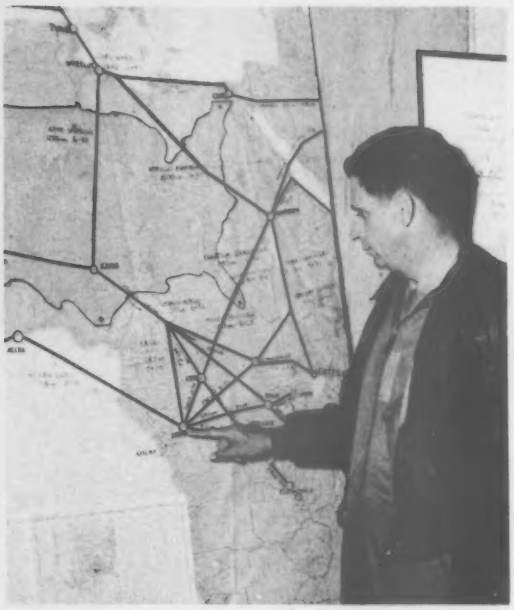
The Gulf of Suez and the Gulf of Aquaba passed astern and the Globemaster *moved out over the expanse of the Great Nafud Desert of Saudi Arabia. Sunlight cast fingers of sheen and shadow on dunes and dry washes stretching all the way to the horizon. What a miserable place this would be to come down in. As far as the eye can see there is no sign of lake or stream to relieve the arid monotony. At the end of the desert lies Dhahran, with showers, beds, and food.*

On the afternoon of the second day Major Griffin eased back on the steering column as the 58 tons of aircraft leveled off over the runway at Karachi. The landing was made without incident, and three hours later Trip 227 was once again airborne with a contingent of Pakistani troops bound for duty with the United Nations forces in the Congo.

Those Pakistani troops looked real sharp lined up on the runway at Karachi. Lean, hard-looking men without an ounce of fat on any of them. The loadmaster, A2C Harrell Washington, supervised the loading of their gear and saw to it that it was properly tied down. Some of us were surprised that so many of the Pakistani troops spoke English. The British influence has left its mark. As a matter of fact, the Pakistani general who came to see the troops embark looked quite British with his swagger stick, his clipped moustache, and the pips on his shoulder. He was Brig. Gen. Bahadur Sher and Colonel Steinle gave him a VIP tour of the aircraft. He seemed to be real interested in everything he saw and kept the Colonel busy answering his questions.

That Pakistani military band was really something to see—and hear. What a send-off! Drums and Scottish bagpipes, with the musicians dressed in colorful costumes including plumed hats and white gaiters. Wonder if the bagpipe is another inheritance left by the

Pakistani troops in coveralls and berets smartly carried their gear aboard the aircraft where it was stowed away for the journey under supervision of the loadmaster. In a short time the* Globemaster *was on its way with another contingent of troops for U.N. force in Congo.



At crew briefing two hours before takeoff, Major Griffin points to Leopoldville, their destination. Map of U. S. superimposed on that of Africa here illustrates the vast distances covered by flight.

British. The troops, wearing berets and field packs, and with every sleeve rolled exactly to the elbow, marched aboard in precise formation. They were armed with carbines and automatic weapons. We sleep tonight back at Dhahran and push on tomorrow for Khartoum in the Sudan.

This is the last leg on the outbound run to Leopoldville. Nine more hours over the jungle and the troops will be at their destination. Wonder what's cooking in the Congo along about now. We were a little late getting off the ground at Khartoum—sick engine. TSgt. Donald Kindley, the flight engineer, worked some of his special magic and things are in good shape again.

There was no time to look around much on the ground, but there is a lot of interesting history wrapped around Khartoum and the Sudan. This is the country where the British used to have their famous Camel Corps, a cavalry force that could cover a hundred miles a day over the desert. The troops were tied to their saddles as a camel rides a lot rougher than a horse. The English general Kitchener captured Khartoum just before the turn of the century. For his feat he was given a title, Baron Kitchener of Khartoum. They say it was Kitchener who arranged to have the streets of the city laid out in an arrangement like the Union Jack. It took those troops in the Camel Corps nearly two and a half days to travel as far as we do in an hour.

Now Leopoldville is behind us and the course lies north over the Sahara Desert. Wheelus Field at Tripoli is the next stop. Our troops are gone and the only cargo is a 27,000-pound communications van. Things were quiet at Leopoldville, for which everyone was properly grateful. Although nobody mentioned it, some of us remembered the unpleasantness at Stanleyville that happened to another crew. But the troops debarked quietly, and everybody concentrated on finding some

Sleeping sisters. Two MATS Globemasters *spend a companionable night on the parking ramp at Dhahran, Saudi Arabia. Dhahran became an important aerial crossroads for USAF transports assigned to the Congo airlift.*

A colorful Pakistani military band, featuring drums and bagpipes, lined up on the runway to give their departing comrades a proper sendoff. As the troops marched in formation aboard the Globemaster, *the musicians marked the occasion with a spirited and enthusiastic rendition of appropriate martial airs.*

shade from the terrific heat. Most impressive features of Leopoldville were the broad streets, modern buildings, and the tremendous length of the runway.

The refueling stop at Kano in Nigeria kept us on the ground for two hours. That would be an interesting place to spend a little time. The city is hundreds of years old and is surrounded by a wall 40 feet thick that rises to 50 feet high in some places. Kano has always been a big trading center and junction point for the old caravan routes. The wall was probably built as protection against the bands of Arab slave-raiders who used to sweep down from the north in years gone by. From Kano to Wheelus it is 1,500 miles. One more stop for fuel, and then—home.

Pakistani general who watched the troops embark discusses the cooperative efforts of nations supporting the U.N. mission in the Congo.

Once more the Globemaster *crossed the coast of France leaving the long monotonous expanse of the Mediterranean behind. The steady drone of the engines bores deep into the soul to become a part of every man aboard. Once again the landscape below assumes the appearance of a child's toy world as the patchwork fields and villages of Provence pass steadily astern. Major Griffin, as much as anyone, was looking forward to seeing the runway at Chateauroux.*

We're late, not too late, but late just the same. That sick engine at Khartoum and a few minutes lost dodging thunderstorms here and there pulled us off schedule. I'd just as soon this hadn't happened with the Old Man's deputy in the next seat, but there's no help for it. Fortunately, we have a real fine group of enlisted types aboard. None of them are from Chateauroux. They came over from Donaldson on 60-day TDY to help with the airlift. But they're good, every one of them. With a team like this we can't miss.

The Globemaster *moved into the pattern at Chateauroux. Conversation picked up as the faint trickle of electricity associated with landing infiltrated the atmosphere. The bright runway and white operations building at Deols came into sight. Chateauroux, its weather-beaten buildings and irregular tangle of streets, looked good from the air. With the careful skill of long experience, the pilot reached with his wheels for the concrete runway. The* Globemaster *settled and rolled to a stop. The engines died and the ensuing silence was strangely intense. After 56 hours and 25 minutes in the air, Trip 227 to the Congo was over.*

Take a critical supply requirement.
Add MATS, AACS, AMC, and a combat cargo outfit like USAFE's 322d. Result?

INSTANT LOGISTICS

by TSgt. John R. German

NOT TOO MANY YEARS AGO, a young French doctor trekked through the dark, humid jungles of equatorial Africa to a small village of Malolo to check rumors of severe illness in that area.

Minutes after he arrived, tom-toms began tapping out an urgent message: "Typhoid fever. Rush medicine!" Neighboring villages relayed the message until it reached Bwonogonalo, scores of miles away, where medical supplies existed.

Two days later, in midafternoon when the steaming jungle heat was unbearable, a native, dripping with perspiration, collapsed from exhaustion at the door of the doctor's hut. The journey for the package of antibiotics handed from one runner to another between Bwonogonalo and Malolo had ended.Those threatened with death from the dread disease were saved.

Although the setting changes from Africa yesterday to the Middle East today, the same urgencies of supply and demand exist. The method of delivery however, has vastly changed.

A radar station in Turkey is raking the skies with electronic beams, constantly alert for that one exacting moment that would, if it ever happened, change the entire course of world history.

Suddenly something snaps in the antenna drive assembly, destroying it beyond repair. Highly qualified Air Force technicians rush to the maze of electronic equipment stored specifically for such emergencies—but there isn't a spare drive assembly to be found. There is now a deep void in the North Atlantic Treaty Organization defense perimeter.

Like a general needing infantry troops to fill a wide gap in a front line, NATO officers realize that replacement of the link is a matter of top urgency.

Throughout a tightly knit network of supply areas the message is repeated in logistics argot, but there isn't a replacement part to be found in the whole NATO defense setup. The situation grows grimmer.

A military circuit is patched into Air Materiel Command's network at Chateauroux Air Station in France, alert night and day for such emergencies.

From this point on, the process reflects one of the most fabulous advances in modern logistics within the U. S. Air Force. On special equipment, an IBM card is punched out by technicians. The card carries a multitude of information concerning the item so urgently needed. Each hole in the card means something vitally important: organization requesting the part, cost of

Col. T. H. Watkins commands the 322d Air Div. with headquarters at Evreux-Fauville Air Base France. The division provides logistic service to area of responsibility assigned to USAFE.

operates the European air logistics system. Commanded by Col. Tarleton H. Watkins the division flies continuous supply schedules over an area more than five times larger than the United States. It includes two continents and 32 countries from Norway in the north to Pakistan in the east.

To help provide the thousands of items needed to supply U. S. soldiers and airmen on duty with NATO forces in Europe and the Middle East, USAFE's 322d AD works closely with members of AMC and MATS in a three-command tie-in. As in the case of the defective radar part in Turkey, the 322d's operations are often triggered by emergencies. Take *Operation Bluebat*, for example.

the item, where it can be located, code number, and so on—up to 13 separate pieces of information.

Working at an incomprehensible speed of 10 cards a minute—or transmission speed of six seconds for each card—the information is relayed over a transceiver system to Andrews AFB in Maryland, thousands of miles away. There similar machines are cutting exact duplicates of the cards.

In turn, by using another transceiver, this same information is immediately dispatched to an AMC depot in California.

Within a couple of hours after a telephone call had procured the drive assembly, it is being flown to Dover AFB, Del., for trans-shipment to another aircraft headed for Chateauroux Air Station.

Meanwhile, a Lockheed C-130 *Hercules* turboprop transport of the 322d Air Division (Combat Cargo), stationed at Evreux-Fauville Air Base, France, is diverted to Chateauroux. The pilot stands by with his crew to wait for the incoming MATS C-133 *Cargomaster* loaded with tons of materiel including the radar assembly.

Within minutes after the C-133's arrival, the *Hercules* is flying due east toward Turkey, the final link of a complex but amazingly rapid supply operation. A few hours later the radar set is again in operation.

The Rapid 322d

Often called the "Knights of the Air" for their humanitarian deeds in the European area, the 322d AD

When the Lebanon crisis erupted in 1958, personnel and aircraft virtually performed logistic miracles after President Eisenhower gave the word to deploy American armed forces to Beirut.

This supply job took some of the division's Lockheed C-130s from Evreux-Fauville, C-119 *Boxcars* from Dreux Air Base, huge double-decked MATS C-124 *Globemasters* from Rhein-Main Air Base, Germany, where they are assigned from the States for six months at a time, plus Rhein-Main's C-54 *Skymasters* and C-131 *Samaritans*. The *Samaritans* are regularly flown by the 7167th Air Transport Squadron (Special Missions) in assisting the 2d Aeromedical Evacuation Group, also at Rhein-Main Air Base.

Less than two hours after the Lebanon alert was sounded at the Evreux-Fauville headquarters, the 322d had its first aircraft at the staging zone. Within eight hours there were 32 C-130s, 19 C-119s, 8 C-124s loaded and ready for takeoff from the runways of Erding and Furstenfeldbruck, Germany.

The turboprop *Hercules* carried an average of 11 tons per trip. Loaded turnarounds averaged 25 minutes. Unloading in the Middle East took a little longer because the planes were rigged for paradropping equipment in case landings could not be made.

In all the 322d Air Division airlifted in excess of 8,000 fighting troops and more than that many tons of supplies and equipment from central Europe to Beirut, Lebanon.

The story of the Lebanon crisis is now history, but

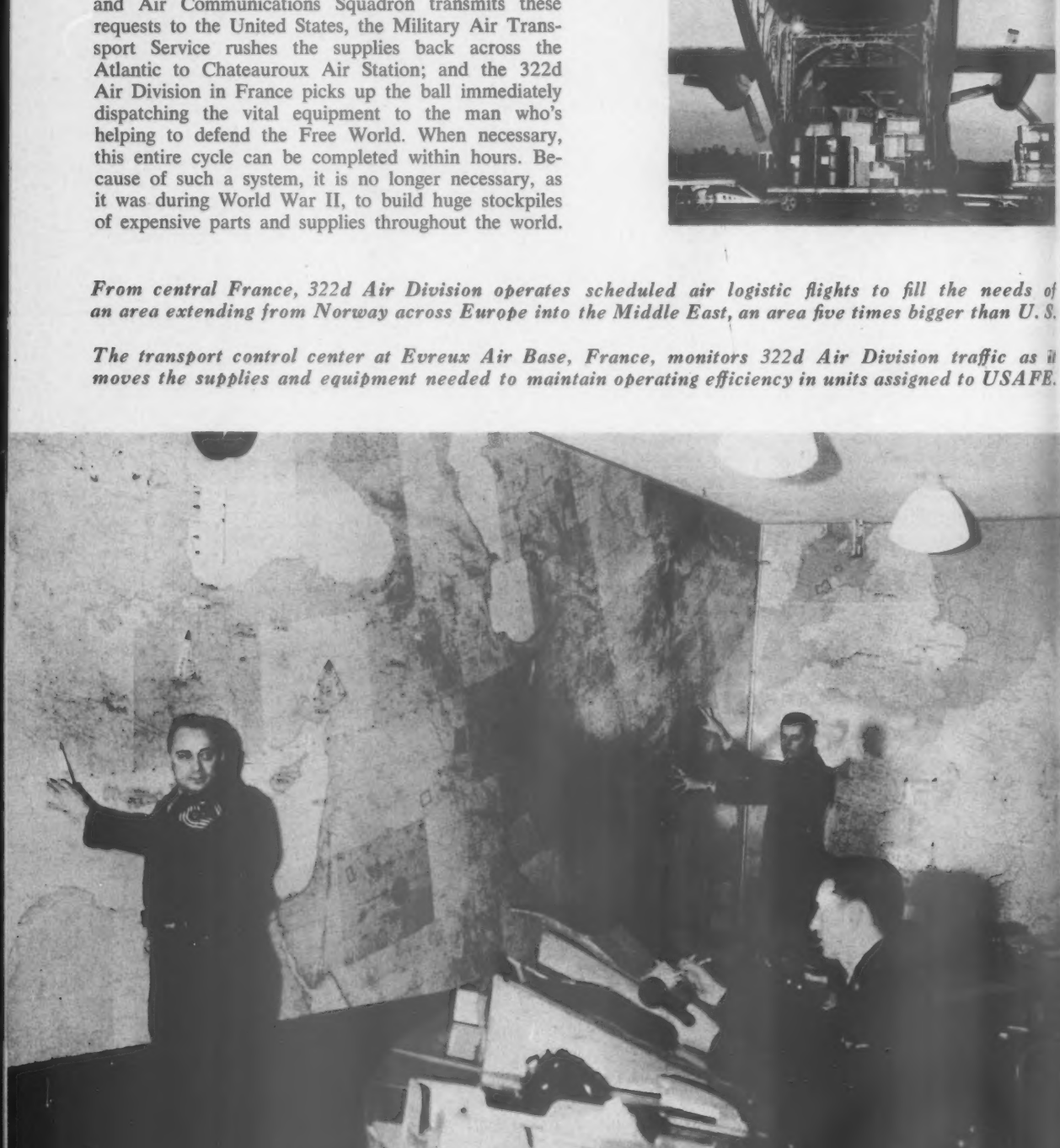
the division's logistics airlift support is still a conversational topic.

Although the 322d is just five years old, its personnel are now based in eight foreign countries and its scores of top-rated pilots are, this very minute, filing flight plans to more than 100 airfields scattered throughout an area encompassing more than 15 million square miles.

It takes a vast and highly coordinated effort to carry out such a logistic mission. The Air Materiel Command's organization at Chateauroux receives supply requests from throughout the area; the 1992d Airways and Air Communications Squadron transmits these requests to the United States, the Military Air Transsport Service rushes the supplies back across the Atlantic to Chateauroux Air Station; and the 322d Air Division in France picks up the ball immediately dispatching the vital equipment to the man who's helping to defend the Free World. When necessary, this entire cycle can be completed within hours. Because of such a system, it is no longer necessary, as it was during World War II, to build huge stockpiles of expensive parts and supplies throughout the world.

From central France, 322d Air Division operates scheduled air logistic flights to fill the needs of an area extending from Norway across Europe into the Middle East, an area five times bigger than U. S.

The transport control center at Evreux Air Base, France, monitors 322d Air Division traffic as it moves the supplies and equipment needed to maintain operating efficiency in units assigned to USAFE.



SLANTS ON SPACE

On the second day of the New Year the Earth reaches perihelion, or its closest orbital approach to the Sun. Then the distance between the two bodies will be, in round numbers, 91,450,000 miles. Aphelion, when the two are farthest apart, occurs in 1961 on July 5, with the intervening distances 94,500,000 miles. The mean distance between these two members of the solar system is 92,900,000 miles, usually expressed in the round figure of 93,000,000 miles.

The New Year is bringing with it a relatively rare astronomical occurrence; two of its months will have full moons twice. The dates: January 1 and 31; April 1 and 30.

The first of 1961's four eclipses occurs on February 15 when there will be a total blackout of the Sun, visible to observers in Europe, North Africa, and Asia. A second solar eclipse is due August 11. The year will also see two partial eclipses of the Moon, one on March 2; the other on August 26.

There were the same number of eclipses last year, four. The total number of eclipses annually is not constant, however. The minimum is two, which always will be solar. The maximum may run to seven, of which four or five will be solar and two or three of the lunar variety.

In completing its annual orbit around the Sun, the Earth travels a distance of 590,000,000 miles. This is a sidereal, or star year, as distinguished from the more familiar calendar year. A sidereal year is 365 days, 6 hours, 9 minutes and 9½ seconds, or expressed in the decimal system, 365.25631 days. It will be apparent from the excess time over the 24-hour day on which our calendar year is based that a little more than an extra sidereal day accumulates every four years, hence the added day in leap year to bring sidereal accounts into closer balance, so to speak.

The orbit in which the Earth travels around the Sun is called the Ecliptic, because it is only in this plane that eclipses can occur. The Moon's orbit is tilted approximately five degrees to this plane, hence a solar eclipse can occur only when the Moon is moving across that plane between the Earth and the Sun. For a lunar eclipse, the Moon must be moving across that plane at a time when the Sun is on the opposite side from the Earth so that the Moon is passing, in effect, behind our planet with relation to the Sun.

The space suits designed for the use of *Project Mercury's* astronauts weigh 20 pounds each. This total includes the weight of shoes and special helmet.

The practice of sending what would be called laboratory animals aloft to test the safety of the vertical outer environment for man is scarcely new—it goes back to 1783, the very same year in which the Montgolfier brothers of France invented the first practical balloon. In pioneer ascensions the balloons bore nothing aloft and were "captive" or tethered to the ground by cable. On September 17, 1783, however, one was sent aloft with live creatures in the gondola — one sheep, one rooster, and one duck. They soared to an estimated 1,500 feet and were brought back to Earth, seemingly none the worse for their experience. Emboldened by their survival, perhaps, a contemporary daredevil named Pilatre de Rozier made the first manned balloon ascent on October 15, 1783. He settled for the conservative peak altitude of 84 feet. In their first successful demonstration of powered flight at Kitty Hawk, N. C., in December, 1903, the maximum height reached by the Wright Brothers is estimated to have been about 14 feet above the sand dunes.

A historian suggests that some of the current speculation about man's ability to adjust to space travel involving periods of more than a month might take a look backward at the then radical adjustments which marked the dawn of the era opening up the New World.

To reach San Salvador on his epic voyage in 1492. Columbus spent 32 days at sea from his last port of call or double all known existing records for ocean sailing. His estimate of the distance to be traveled was 75 percent under the actual mileage by modern computation. He had to doctor his ship's log to keep a restive crew in hand, then quell a mutiny on his flagship on October 10 to keep headed westward. Two days later came the historic landfall in the Caribbean.

By comparison with numerous other expeditions, Columbus made fairly good time. The three ships which founded the Jamestown settlement in Virginia departed England on 20 December 1606 and did not reach the vicinity of their objective until late April 1607, debarking the settlers they carried on 24 May. In 1620 it took the *Mayflower* and the Pilgrims more than two months at sea before they raised the New England coastline. It was not until about 1750 that westward voyages from England to North America, for example, took an average of 30 days to complete.

As surviving accounts of many participants in these and even more arduous ventures of the era testify eloquently, adjustment could be cruel and rugged but the individuals managed, and without elaborate preconditioning courses, custom-built equipment, or every last word in safety precautions and devices.

—WILLIAM A. KINNEY

that the poster 'It all depends on the airmen' has much truth about it with such devoted to the duty airmen. I wish them to keep in mind the following borrowed lines for the sake of the Air Force's prestige: 'Let your light so shine before men that they may see your good works. Matthew 5:16.'

"Nick, to be in mental contact with the USAF, kindly requests all the airmen to send him magazines and literature on Air Force matters. His address is Nick H. Kasnakides, 124 Zanni Ave., Piraeus, Greece."

Thank you.

Nick Kasnakides

• *To the contrary, Nick, we of the USAF thank you.*

★ ★ ★

Coast Guard Service

Sir: If a man serves in peacetime status with the U. S. Coast Guard, can this time be counted toward retirement? Please bear in mind that during peacetime the Coast Guard is under the Treasury Department.

SSgt. Pat Watlavage
APO 328, San Francisco, Calif.

• *Regardless of the fact that the Coast Guard is assigned to the Treasury Department in peacetime, such service does count toward eventual military retirement according to officials in DCS/Personnel.*

★ ★ ★

F-80 Fan

Sir: I have just completed reading *Just Another Airplane* in your September issue and would like to express my appreciation. As a great fan of the Lockheed F-80 *Shooting Star*, I thought maybe your readers would be interested in some of the pertinent data which marks this plane as one of the most versatile the Air Force has ever owned.

For example, only one XP-80 was ever built and it was powered by a de Havilland *Goblin* H-1B engine. The change to the GE J-33 became effective with production of the first P-80A. Likewise, only a few YP-80s were constructed. Later, however, one of these was converted for photo-recon work and redesignated the XF-14.

When the P-80B came along, another single model had its wings clipped and became a racer with a slightly higher speed than its sisters. It also utilized a GE J-33 engine but equipped with a water-alcohol injection system.

The C-model was the basic design for the T-bird (T-33) that we know today. Its fuselage was lengthened by 38 inches in order to accommodate the added crew member.

A2C John Wible
Myrtle Beach AFB, S. C.

★ ★ ★

Errors . . .

Sir: I believe the gentleman being "Wired for sound" on page 7 of your October issue is Capt. Virgil Grissom, not Lt. Comdr. Walter Shirra as you have identified him.

SSgt. Leroy Davis
Chanute AFB, Ill.

Sir: I served with Capt. Virgil Grissom in the 75th Fighter-Interceptor Squadron in 1953, and I think you will find that he is the astronaut pictured on page 7 in your article *Beyond the Wild Blue Yonder.*

SSgt. Tony Martinez
Hancock Field, N. Y.

• *To both of these readers, you are quite correct. The gentleman pictured is Capt. Virgil Grissom, USAF. To him, our apologies.*

★ ★ ★

And Claims

Sir: On page 23 of the October issue *(Letters to the Editor)* Lt. Myron Wyman claims that *Hotline* is the first newspaper published by a Sage Sector with its initial publication date of October 29, 1958. While *Hotline* may well be the first in that field, it was published as early as 1956 by the 85th Air Division.

TSgt. W. L. Bryant
Moody AFB, Ga.

Answers to questions on pages 19 and 20: 1-b, 2-c, 3-b, 4-c, 5-b, 6-c, 7-b, 8-d, 9-a, 10-b, 11-a, 12-b.

Suggestions . . .

Sir: I would like to suggest that THE AIRMAN, because of its popularity and circulation, include a few fiction articles on a regular basis. I think this would dovetail nicely with USAF's annual short-story contest and might promote added interest in the competition.

TSgt. Edward Presley
Sheppard AFB, Tex.

• *This suggestion has been offered several times in the past. However, the editors feel that there are too many factual subjects of vital importance to Air Force personnel to utilize our limited space for fictional subjects.*

Sir: Once again I would like to express my apprecation for your excellent magazine. However, I would like to offer a suggestion which I think would improve it even more. This is the inclusion of a "news" page of late developments somewhere in the magazine.

MSgt. Henry Lacour
Tyndall AFB, Fla.

• *Our long lead time for copy precludes the possibility of presenting a column devoted exclusively to "news-type" material. We confine our coverage to feature material of interest to the Air Force.*

★ ★ ★

HOW YOU CAN GET THE AIRMAN

Subscriptions to THE AIRMAN are available to those who desire them. For convenience, a subscription blank is printed below. Make all checks or money orders payable to Treasurer of the United States.

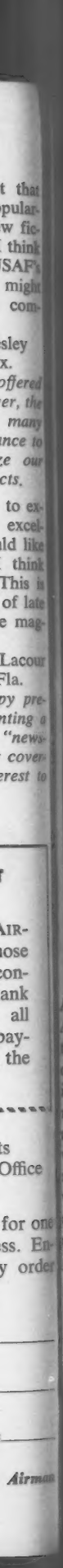
Superintendent of Documents
U. S. Government Printing Office
Washington 25, D. C.

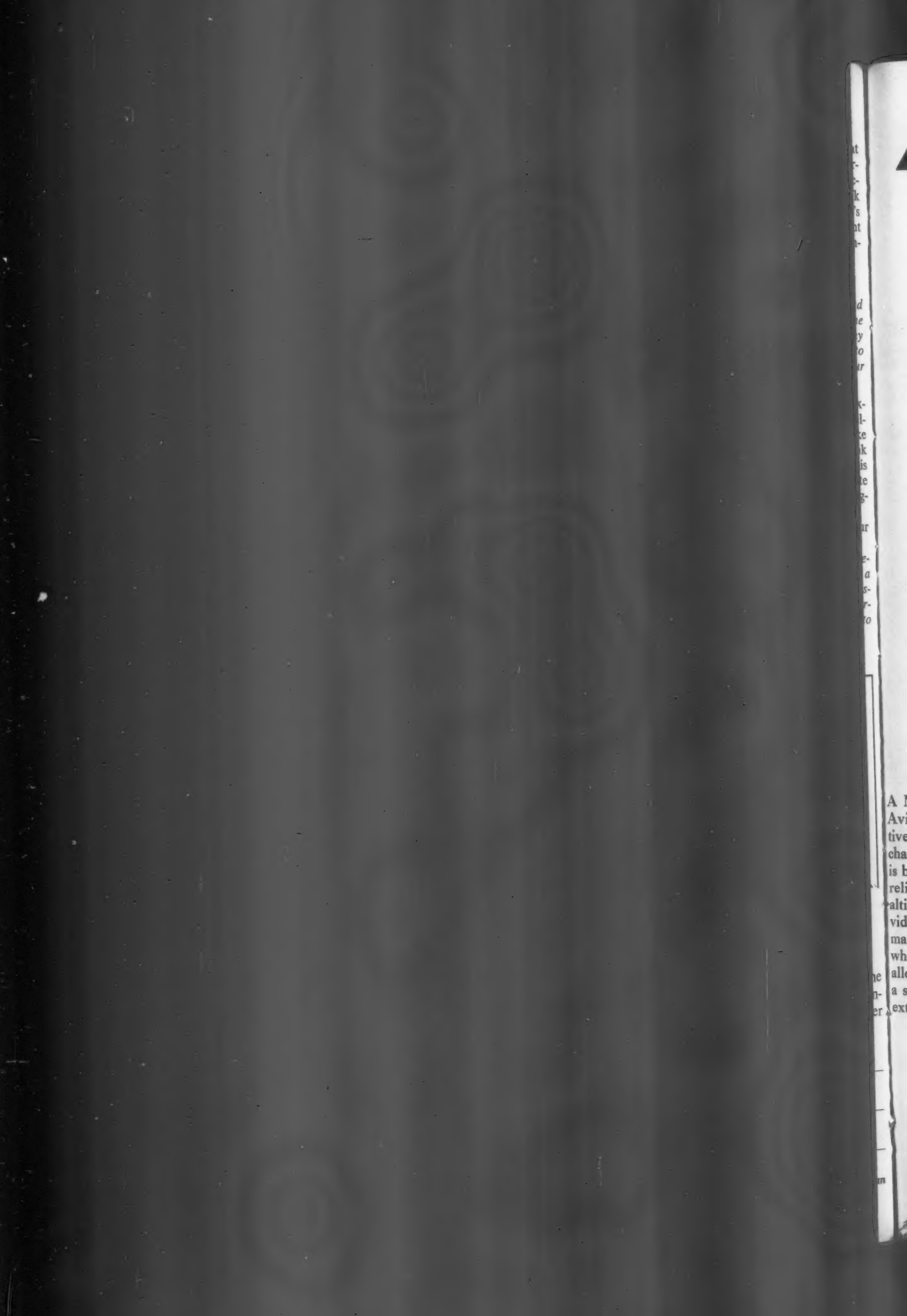
Please send THE AIRMAN for one year to the following address. Enclosed is a check or money order for $3.50.

Name _____

Address _____

City _____ State _____





AIRMAN'S WORLD

A MOON WORK SUIT, designed by Republic Aviation Corp. engineers, is undergoing exhaustive tests in the company's new space simulation chamber and nuclear radiation lab. Initial testing is being conducted *sans* wearer. If the suit proves reliable, volunteers will be tested at simulated altitudes of 300 miles. Advanced models will provide for complete indoor environment, from climate control to food supply. Incidentally, the "legs" which are evident form parts of a tripod which allows the wearer to rest. Internally, the suit sports a seat on which he may relax when the tripod is extended.

B-70 DEVELOPMENT

USAF has announced award of two contracts for the B-70 *Valkyrie* instrumentation systems to the Bendix Corp. One is for vertical-scale instruments, the other for air-data computers.

Vertical-scale instrumentation is to be designed to simplify the presentation of speed and altitude information. It will allow the pilot to make "at-a-glance" readings. Air-data computers will continuously sense surrounding air pressures, supplying this information directly to the appropriate instruments. Here it will be converted automatically into necessary precise information for use by navigation, fire control, autopilot and similar electronic systems.

ASTRONAUT WEATHER

The United States Weather Bureau has been assigned responsibility for meteorological support of *Project Mercury*—this nation's initial manned space flight.

Headquartered in Suitland, Md., adjacent to the Bureau's Meteorological Center, the special unit will chart all weather information between the 35th parallels. These will encompass the orbital path of the first astronaut.

Winds, state of the sea, cloudiness and visibility will be the principal areas of the group's concentration. Particular emphasis will be placed on these factors in the central Atlantic, proposed landing area for the capsule.

Climatological and meteorological information collected will be further applied as guidance for the design of future rocket and spacecraft systems.

HYDRAULIC HOIST

A hydraulic hoist, capable of lifting 50 times its own weight, is under development by the Bendix Corp.

Designed primarily to aid in silo-emplacement of missiles weighing up to 100,000 pounds, the one-ton system is described as powerful enough to slip a *Minuteman* into place as "easily as slipping a cartridge into a rifle breech."

Heart of the system is two remote-controlled telescoping cylinders, each 35 feet long when extended. Because the hoist is mobile, it can also be moved to railside, lift the missile from its carrier, then lower it into firing position in easy stages. At present, 67 distinct steps are necessary to accomplish this same operation.

GUN-TEST INVENTION

Maintenance of equipment you hope will never be used can be an exasperating job—nevertheless, it must be done. Often accomplishment of routine functional tests of such equipment presents complex problems.

Such was the case of A1C Jack Tower, munitions maintenance specialist at Beale AFB, Calif. Charged with maintaining machine guns on B-52s, Airman Tower constructed a test bench which provides a foolproof method for determining tolerances in bolt clearances and other critical gun requirements.

Test-bench simulation ensures that installed weapons will work when and if the guns are needed.

The invention is under consideration for possible USAF-wide adoption.

CONSERVATION FILM

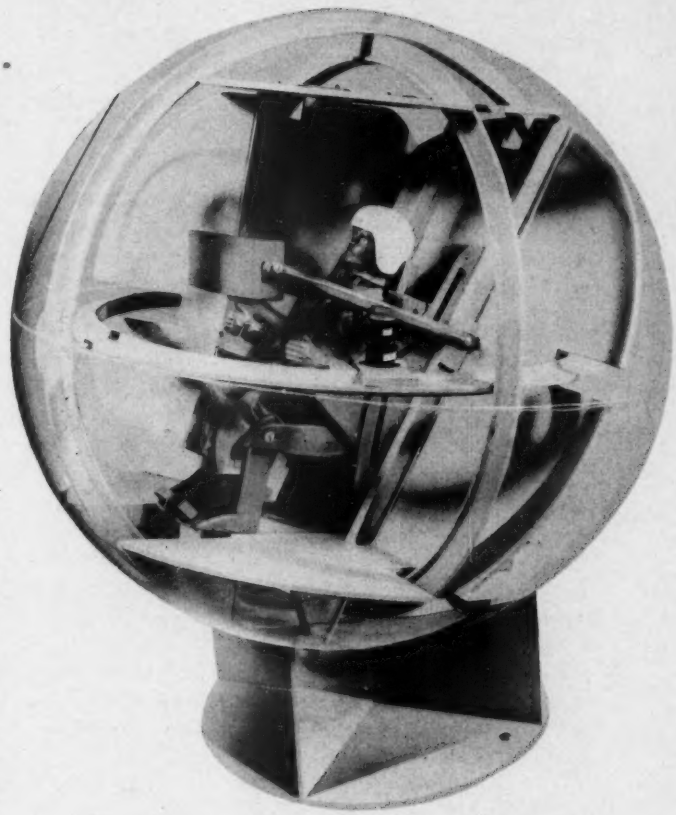
Eglin AFB, Fla. is the "set" for a new 14½ minute film entitled *Runways in the Wild,* the story of conservation within the Air Force.

Sponsored by the National Wildlife Federation and Remington Arms, the movie is scheduled for base showings at Commanders Call and similar activities. It will also be shown on television and at meetings of interested societies.

The film will have its national premiere in Washington, D.C., the first week in March.

DEVELOPMENT ENGINEERING INSPECTION *has been successfully completed on USAF's* Minuteman *ICBM. A portion of that testing was conducted in this mock-up of the underground silo in which the missile will be maintained and launched. This phase of the program was integrated into the overall acceptance inspection which covered complete assembly and test—items for which the Boeing Airplane Co. is primarily responsible.*

A SATELLITE SIMULATOR, *designed to test astronaut reactions to the tumbling and spinning which may be experienced during space maneuvers, is being constructed by the Northrop Corp. The fiberglas simulator will ride on a circular air jet and be controlled by three inertia rings rotating within its inner surface. It will be rotatable on three axes—roll, pitch and yaw—at 70 r.p.m. and allow for testing of human tolerances under these conditions. The unit will be installed at USAF's Aerospace Medical Center, Brooks AFB, Tex.*



"PILLOW" TALK

Recently completed *Bright Star/Pine Cone III* produced at least one result that had not been fully contemplated.

During the operation, a huge 50,000-gallon pillow-tank was employed at one of the air strips as the main refueling station for aircraft in the operation. It proved so successful that an enlarged version has been integrated into the portable-hydrant refueling system at Myrtle Beach AFB, S. C., for further testing. Current test capacity has been upped to 90,000 gallons.

Built by the Goodyear Tire and Rubber Co., the sack is constructed of rubberized fabric. It is impervious to both climate and contact with liquid petroleum products.

It can accommodate fuels ranging from kerosene to high octane gasoline and can be placed in operation in a matter of hours. Because of its pliant construction, there is no vapor space or void area. Explosion hazards and evaporation are significantly reduced.

BITS OF BLUE

. . . ADC has announced establishment of a command museum. Exhibits will include trophies, battle streamers, paintings and similar items associated with command history. It will be administered by the unit's historical division.

. . . Capt. Joseph Kittinger, Jr., has been awarded an Oak Leaf Cluster for his Distinguished Flying Cross in recognition of his 102,800-foot parachute jump last August.

. . . An Aerospace Primus Club has been established within ARDC. Research and Development personnel will be honored with membership for "outstanding contributions toward the advancement of this nation's aerospace program."

. . . USAF has designated the newly-ordered Lockheed *Jetstar* as the C-140. Initial deliveries are expected early in 1962.

. . . The 525th Bomb Squadron (H) will move from its present station, Homestead AFB, Fla., to Minot AFB, N. Dak., early this spring.

. . . Top three bases in the 1960 Fire Protection Competition were Myrtle Beach AFB, S. C., Paine Field, Wash., and Bitburg AB, Germany.

F-105-BULLPUP TEAM

USAF's Republic F-105 *Thunderchief* will add a new knock-out punch in the near future. Tests have proven the GAM-83 *Bullpup* can be added to the Mach 2 fighter's new armament.

Bullpup was developed to improve dive-bombing techniques used in earlier aerial combat. At that time, fighter pilots were forced to fly dangerously low and close to intended targets. The 11-foot, 570-pound guided air missile can be released from altitudes above the range of normal enemy ground fire.

Employment of the GAM-83 provides fighter pilots with pinpoint accuracy in strikes against tactical targets. Either "conventional" or nuclear warheads may be utilized.

SPACE COCKPITS

With *Project Mercury* hovering on the brink of our manned space program, Air Force and industry engineers are taking a new look at the design of the cockpit.

Latest entry in redesign is that of Lear, Inc., in cooperation with the Wright Air Development Division.

The Mark IV cockpit, full-scale and semi-operational, will allow simulation of spacecrew problems and permit more detailed studies in the area. The Mark IV is designed to accommodate four men on a 30-day orbital mission. Both instruments and controls are designed to "provide maximum safety for both craft and crew."

THE 200,000th AIR EVACUATION *patient passed through Travis AFB, Calif. hospital facilities recently. The record marked the end of a busy decade which began with the Korean conflict. More than half this total was processed during the first two years of that fighting. Number 200,000 was A1C Richard Grayson, a crew chief from Clark AB, P. I., suffering from a back injury. He was processed on to a Texas hospital.*

AERIAL SAVE

A SAC KC-135 crew recently added a life-saving role to their assigned refueling job.

While on the alert at Grand Forks AFB, N. Dak., an early morning emergency call was received from a B-47. A flap malfunction created a condition which made landing an extremely hazardous operation; simultaneously, fuel was running low.

The KC-135 was dispatched immediately and made contact at a time when only five-minute's fuel remained aboard the crippled bomber. Hookup was accomplished and life-giving JP-4 transferred.

However, this alone was not enough. To offset the damaged flap, the wing tank on the same side of the plane was pumped full. A nearly routine landing was then accomplished.

SEE AND SORT

Aircraft controllers have long had the capability of "seeing" airborne aircraft under adverse weather conditions.

Unfortunately, the same sight has not always been available once these aircraft are on the ground. Now, however, such added vision will soon be operable at most major air fields—both military and civilian.

The new "see and sort" taxi radar units, which provide high resolution pictures of the entire field and surrounding territory, are nearing the delivery stage. Their installation will allow tower operators to spot any obstruction in the area which might prove hazardous to taxiing aircraft or ground vehicles.

The instrument is so precise it is capable of discerning two men, standing arm lengths apart, as far as 1,500 feet away.

THE RAINS IN SPAIN

The rains simply didn't fall in Spain late last summer—at least in the Zaragoza area. The result was a major problem for sheepherders in upland plateaus.

Disaster might well have struck had it not been for friendly and sympathetic airmen at nearby Zaragoza AB. With the aid of a 1,000-gallon water-tank truck, a Spanish employee of the base as an interpreter, and the permission of the base commander, members of the local military fire department took a hand. They trucked more than 1,600 gallons of the precious fluid to a dry dam site three miles from the station.

The emergency measure was enough to tide the flocks over until fall rains began, and to bring a letter from the mayor of nearby Garrapinillos, expressing the area resident's profound gratitude.

FUSS AND FEATHERS

Missilemen commonly refer to their rockets as "birds," but only the Douglas launch team on Pad 17B at Cape Canaveral, Fla., can claim to have launched an honest-to-goodness, genuine bird.

A stubborn, redheaded woodpecker persisted in hammering away at an electrical cable assembly high on the umbilical mast in 17B. Its perforations of the styrofoam and aluminum tape covering the cable alarmed the engineers.

So they tried to rout Mr. Woodpecker. However, he ignored such traditional devices as shouts and stones. Then the missilemen tried more sophisticated techniques, such as sounding a loud horn which they fastened on the mast, or chilling the cable with carbon dioxide.

Finally, in desperation, they put together a "countdown manual" and prepared to launch the bird—missile style.

A high-pressure air bottle was attached to the mast near the intruder's latest excavation attempt, and a lanyard extended to the deck of the launch pad.

With the arrival of the woodpecker, the countdown began. Ten seconds . . . 9, 8, 7, 6, 5, 4, 3, 2, 1, . . zero —WHAM! Up went the bird, tumbling slightly. In a somewhat startled fashion, it straightened out and, wavering somewhat, flew slowly away, never to return.

PROFESSIONAL READING

Military Publishing Institute, Inc., has just released their 1961 edition of the annual *Air Force Blue Book* ($1.50).

Edited by Tom Compere, volume two has been enlarged and improved over the excellent inaugural effort of a year ago.

In the opening section, it features 34 "chapters" which comprise a readable cross section of the air world. These range from a Medal of Honor story through *The Shape of Things to Come* by Lt. Gen. Bernard Schriever. Both appeared originally in THE AIRMAN.

Each command is featured in a separate chapter, and many of the year's highlights are also given preferential treatment, in narrative form, within these pages.

Following the opening chapters, the *Blue Book* editors have compiled a section entitled *Air Force* Facts which contains just about all the pertinent information regarding staffs, commands, equipment, and history. Additionally, there is a chronological count-down on the events of 1959.

In short, this publication qualifies as one of the finest of its type available and should find a welcome place on any airman's bookshelf.

PAPERBACKS

The Bomb: The Story of Hiroshima, Fernand Gignon, Pyramid.

Night Intruder, Richard Bickers, Associated.

The Marauders, Carlton Ogburn, Jr., Crest.

POW, Charles Dick, Associated.

The Next 50 Years of Flight, Bernt Balchen and Eric Bergaust, Viking.

Flight 685 is Overdue, Edward Moore, Ace.

Jungle Pilot, Richard Bickers, Associated.

The Liberators, Richard Bickers, Associated.

Hurricane Squadron, David Richards, Associated.

Luftwaffe, Gerhard Muller, Associated.

Skip Bomber, Lloyd Olson, Ace.

You Ask It

Is it true that the application deadline for WWII GI loans has been extended?

Yes, the new cutoff date is July 25, 1962.

I will retire in a couple of months. In view of this extension, I intend to make loan application to go into business with a friend. However, he is not a veteran. Will I still be able to make such a loan?

Yes. However, the amount of VA guarantee or insurance will be in proportion to your interest in the total loan. VA will not guarantee the part which represents the non-veteran's contribution.

I will be discharged in time to enter college next fall. However, I intend to work days and attend school at night. For purposes of my VA training allowance, will such schooling be considered full- or part-time?

Night school training may not be measured as more than three-quarters time training for allowance purposes.

I have just become a proud father and would like to add my son's name on my GI insurance policy without altering my wife's beneficiary status. What is the proper procedure?

You may execute a change of beneficiary form, adding your son's name as a contingent.

My father, a WW II veteran, died recently of a nonservice-connected disability. As I am under 18 and unmarried, I would like to know what are the active service requirements of my father which must be established to make me eligible for a VA pension?

Your father must have had at least 90 days of active service, a portion of it during wartime, and must have been discharged under conditions other than dishonorable. There are exceptions to this 90-day service clause which your local VA office can explain.

I am 22, the son of a WW II veteran who died of a service-connected disability, and presently in the Air Force. I would like to go to school under the War Orphans Education program when I am discharged, but I will have passed my 23rd birthday. Are there any exceptions to this age limit?

Yes. There is a provision for such waivers when you have served on active duty before reaching age 23. Also, your discharge must be under other than dishonorable conditions.

If a veteran should die without naming a beneficiary for his GI insurance policy, how and to whom is the money paid?

Insurance payment would be made to his estate in one lump sum.

Early in November 1944,
Allied ground forces launched their drive
for the Rhine River,
and Allied air forces were assigned major coordinated roles.

In the Name of Congress
No. 28 IN A SERIES

Air Support for OPERATION MADISON

by SMSgt. Hal Bamford

TWO YOUNG MEN who were destined to fly side by side to immortality were among the new class of cadets reporting to preflight school at Santa Ana, Calif., on March 23, 1943.

From opposite sides of the nation, the two had traversed completely different paths to their initial meeting, and from this point forward, they would do likewise until once more united on an explosive ride to a common death.

The dual story of Donald Joseph Gott and William Edward Metzger, Jr., properly begins in the fall of 1942. On September 21, Don Gott, a native of Oklahoma, was sworn into the Enlisted Reserve Corps in the grade of private and alerted to await his call for cadet training.

Exactly two weeks later, Bill Metzger was inducted from his native state of Ohio. Shortly after being assigned to the 83rd Ordnance Battalion at Camp Young, Calif., he too applied for cadet training.

Both men were called to begin their pursuit of wings and commission the following March. However, they were not destined to finish even this first phase of training together. By June, Cadet Gott had completed his first training phase and moved on to primary school at Glendale, Ariz. Illness, meanwhile, forced Cadet Metzger to remain behind, and it was not until July that he proceeded to primary at Twentynine Palms, Calif.

On January 7, 1944, Donald J. Gott was awarded pilot wings and commissioned a second lieutenant upon graduation from advanced two-engine school at Stockton, Calif.

In the meantime William E. Metzger, Jr., also continued with his training, and finally graduated from the advanced school at Douglas Field, Ariz., on March 11, 1944. He too received pilot wings but was awarded the grade of flight officer rather than a commission.

Two weeks later, Lieutenant Gott completed another course and graduated with honors from B-17 transition school at Hobbs Field, N. Mex. Their diverging paths were now destined to take them even further apart when late in July Lt. Don Gott departed for England. While he underwent combat crew replacement training, FO Bill Metzger was being shuttled between several assignments within the ZI.

On August 17, 1944, however, their paths, now widely separated, once more began to bend toward a meeting. On that date, Lieutenant Gott was assigned to the 729th Bombardment Squadron, 452nd Bomb Group.

Within days he began his combat career, piling up mission after mission. Early in October he passed the 20-mission mark, was promoted to first lieutenant, and rightly laid claim to the title of veteran combat pilot. Having reached such a respected plateau, in mid-October he was selected to transition a new arrival to his crew. The new copilot was Lt. William Metzger. (He had been promoted in August.)

During the next two weeks, Metzger learned the ins and outs of combat at the side of his former preflight buddy and began to fit neatly into an already tightly knit group.

While this drama of limited scope was unfolding, one of much wider consequence was taking place upon the battlefields of Continental Europe.

Allied ground forces had pushed deeper and deeper into *Festung Europa* since D-Day and were now poised for the final drive into Germany proper. Early the second week in September, American forces penetrated the German wall at Aachen. By mid-October, Allied forces presented a solid front of advancing troops which threatened, at any moment, to erupt into a tidal wave which would inundate Hitler's Germany.

Allied commanders began to concentrate on support for these troops in the all-important breaching of the

WM. E. METZGER, JR.

DONALD J. GOTT

Rhine River. Among the coordinated efforts against this immediate goal was *Operation Madison.*

Launched from the Aachen area on November 8, 1944, the plan called for Gen. George Patton's tank forces to exert pressure on both southern and northern flanks of the Metz salient. South of Metz, the XIIth Corps was to begin its drive northeastward toward the Rhine to establish a bridgehead in the Darmstadt area and, concurrently, north of Metz, the XXth Corps was to strike toward the Saar basin and the Mainz-Frankfurt area.

Major aerial support was to be flown to protect this two-pronged attack. In addition to P-38s, 51s and 47s and the B-25s of 9th Air Force, the B-17s and 24s of the 8th were also assigned a major role in this mission. Their primary aim was to attack east of the point of the drive "to neutralize enemy troops, destroy their defensive fortresses, and wipe out bridges, supply dumps, and similar installations."

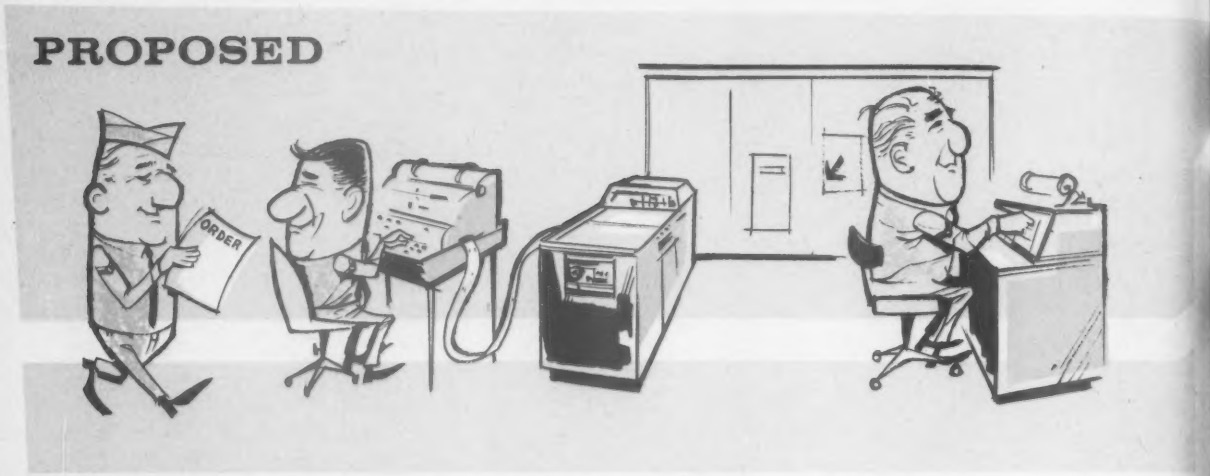
On the morning of November 9, the second day of the drive, 1,295 B-17s and 24s attacked targets in the battle zone. Among them was the B-17 *Flying Fortress* piloted by Lieutenants Gott and Metzger.

Their immediate objective was Thionville, but since visual bombing proved to be impossible in this area 308 of the *Forts* were diverted to secondary targets in the marshalling yards at Saarbrucken.

Identical citations, contained in General Order 38 published on May 16, 1945, contain a graphic description of the action which involved the Gott-Metzger B-17.

On a bombing run upon the marshalling yards at Saarbrucken a B-17 aircraft piloted by Lieutenant Gott was seriously damaged by anti-aircraft fire. Three of the aircraft's engines were damaged beyond control and on fire; dangerous flames from the No. 4 engine were leaping back as far as the tail assembly. Flares in the cockpit were ignited and a fire raged therein, which was further increased by free-flowing fluid from damaged hydraulic lines. The interphone system was rendered useless. In addition to these serious mechanical difficulties the engineer was wounded in the leg and the radio operator's arm was severed below the elbow. Suffering from intense pain, despite the application of a tourniquet, the radio operator fell unconscious. Faced with the imminent explosion of his aircraft and death to his entire crew, mere seconds before bombs away on target, Lieutenant Gott and his copilot (Lieutenant Metzger) conferred. Something had to be done immediately to save the life of the wounded radio operator. The lack of a static line and the thought that his unconscious body striking the ground in unknown territory would not bring immediate medical attention forced a quick decision. Lieutenant Gott and his copilot decided to fly the flaming aircraft to friendly territory and then attempt to crash land. Bombs were released on the target and the crippled aircraft proceeded alone to Allied-controlled territory. When that had been reached, Lieutenant Gott had the copilot personally inform all crew members to bail out. The copilot chose to remain with Lieutenant Gott in order to assist in landing the bomber. With only one normally functioning engine, and with the danger of explosion much greater, the aircraft banked into an open field, and when it was at an altitude of 100 feet it exploded, crashed, exploded again, and then disintegrated. All three crew members were instantly killed. Lieutenant Gott's loyalty to his crew, his determination to accomplish the task set forth to him, and his deed of knowingly performing what may have been his last service to his country was an example of valor at its highest.

This dual award, the most recent in Air Force annals, marked the fourth multiple presentation of the Medal of Honor to Air Force personnel in WW II and the fifth in USAF history. It brought the roll of Medal of Honor recipients to a total of 38, all but five of which had been awarded since the infamous attack on Pearl Harbor.



Increasing complexity of personnel records has dictated a

Revolution in the Or

HOW WOULD YOU LIKE to overthrow the regime of "Ponderous Paperwork"—do away with your present 201 file and quit worrying about those "several" copies of special orders? What's your reaction to having all your qualifications made available to personnel? You say you like the idea? Well, in a dozen second-story offices, tucked in a remote corner above the Base Exchange at Bolling AFB, 40 personnel specialists are plotting just such a revolution.

Recent personnel-form surveys have disclosed some facts which stagger the imagination. They have revealed, for example, that there are nearly 800 personn vidual forms presently in existence; that it takes up to 18 e Pen days to collect, process, and report some of the da "We' required. hand

Officials have also uncovered an average rate anage error as high as 20 percent in the maintenance of the mina forms. hese a

Col. Gustav A. Neuberg, head of *Project Auto Ma* s of t the program designed to reverse this mushroomi "Our tendency, recently revealed some of the goals of th aske impending revolution, which would affect every i nt a

Orderly Room

by SMSgt. Hal Bamford

personnel individual and every level from unit orderly rooms to up to the Pentagon itself.

the day "We'll reduce this number of forms to no more than a handful," he said. "We'll cut production time for rate management reports to about 10 days. And we hope to e of the eliminate *all* errors which occur in recording data."

These are just a few of the facts cited to show the bene*Auto Mate* fits of the *Auto Mate* system.

shrooming "Our estimates show that Air Force personnel may als of the be asked to record as many as 10,000 different manageevery item and administration facts," Colonel Curbo, Hqs. Command Comptroller, points out. "Many of these, such as signature, for example, will be duplicated hundreds of times. We honestly believe all this will change—from the orderly room right on through the Pentagon."

Cause of these surprising figures seems to hinge on the fact that requirements for personnel data, in many cases, have developed almost independently. Offices have developed a multitude of forms, records, and processes to accomplish their responsibilities. Consequently, the individual is often called on to supply the same data dozens of times in dozens of different places.

A recent survey of less than 10 percent of the hundreds of existing forms and records showed that duplication within this limited sampling ran as high as 1,200 percent. Personnel officials estimate that this percentage would border on 15,000 if all existing forms were dissected in the same manner.

If this program does what it is designed to do, such duplication will be sliced to about seven percent.

Auto Mate officials hasten to point out that these problems are not a reflection on offices or the Air Force. Rather, they present a picture of conditions which have developed as a result of meeting situations and requirements as they occur.

Analysis has revealed that as each separate personnel action grows, inevitably it sets up a chain reaction. Thus, it not only affects itself but all other personnel areas as well. As Colonel Neuberg points out, each area within the Air Force has its own "language" and most conflict with those of other areas. Consequently, one of the primary aims of *Auto Mate* is to adopt a universal tongue in which all related actions are understandable to everyone concerned.

The present project is ambitious, but its success could spell eventual change—in major proportions—in a field that affects everyone in uniform.

When Maj. Gen. A. P. Clark, USAF's Director of Military Personnel, okayed the project, he pointed out, "Since people are USAF's most valuable asset, it is essential to ascertain requirements for management of this asset and to design a system which will satisfy these requirements."

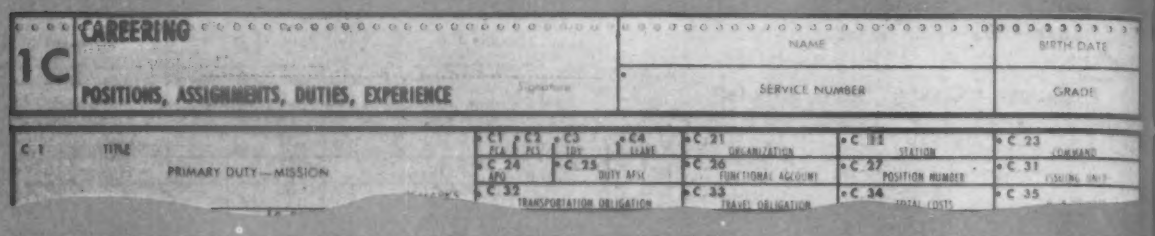
People, Not Numbers

The immediate reaction of most people is one of revulsion at the thought that individuals should be treated in a manner similar to a supply item. *Auto Mate,* however, insures continued consideration of the personal factor in personnel actions.

In reality, Air Force personnel may expect an even greater degree of personal consideration under *Auto Mate* than is possible under current procedures.

To support this argument, consider the form which will serve as the basis for this system. A multitude of current forms will give way to a single Personnel Record—a multipage, multipurpose, looseleaf affair.

It will contain several basic sections labeled Administration, Service Data, Careering, and Learning with provision for expansion to also include Effectiveness, Pay, Positioning, Health, and Individual Services.



Above are sections of the four subheadings presently being tested and evaluated at Bolling AFB, D. C.

Collectively, these comprise Form 1; however, each will be sublettered for ease of reference.

The Bolling task group is currently confining its activities to the first four of these, sections "A" through "D," although others will be added as the evaluation progresses and the workload allows.

These four sections are the Basic Air Force Personnel Record and contain complete breakouts which will provide information to be weighed whenever personnel actions become necessary or desirable.

For example, in the case of reassignment, your need for housing and schools for your children will be taken into consideration in advance. In cases where a choice is possible, availability of these items will figure in reassignment planning.

If you need a three-bedroom house, the receiving station will know it in advance. If you will be using the commissary, they'll know that too. They'll be able to plan and adjust base exchange, club, library, and hobby shop needs—all from information contained in the Personnel Record and discernable by push-button processes.

Other sections have been constructed with the same completeness. For example, there are 10 subdivisions under the heading of Service Data, six under Administration, and five each under Careering and Learning.

This latter provides a fascinating study in the amount of information which will be available in shaping careers. Properly used, it should go far to eliminate malassignments.

The usual information on schools and courses, both civilian and military; languages; scholarships, fellowships and societies; and tests and tests results are all correlated. However, a "transcript summary" has been added to this information to indicate subjects studied and credited at the college level.

These personnel factors will provide a breakout on the type of schoolwork the individual has completed. Thus, if an assignment calls for a physical scientist, automatic data processing will select those individuals throughout the Air Force who possess those qualifications. From this list, the personnel officer will select the assignee and issue the necessary directives for assignment.

Naturally, further criteria, such as grade, service, and allied data, will allow the degree of selectivity to be rigidly controlled.

In all, there are approximately 1,000 personnel factors included in sections "A" through "D" alone. These represent a consolidation and large reduction of data presently contained in countless sources.

Through automated selectivity, individual qualifications may be recognized for any one or combination of personnel factors.

What will probably be even more interesting for non-professional personnel types, however, is that use of *Auto Mate* will allow elimination of the bewildering array of orders which plagues the average man who keeps a personal 201 file. Gone will be such standard items as PCS and TDY orders and others which include

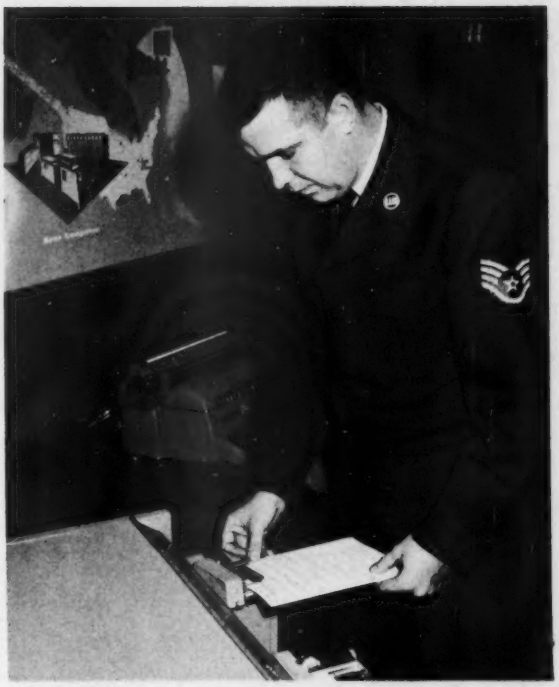
Personnel Action Memorandums and their successors. In their place will be single, minute entries in the overall record.

For example, assume an airman is to be awarded a new AFSC, security clearance, or Commendation Medal. When such information is fed into *Auto Mate*, the action is complete because, simultaneously, it is automatically "reported" on a punched paper tape. Thus, by hitting just two keys, in the award case "CM," the Commendation Medal may be awarded, recorded, and reported. Such action-record-report, dubbed Source Data Automation, is the key to improved personnel management processes in base personnel offices.

At the end of the day, all of these personnel actions will be posted on the tape. By simply playing the tape backward, an automatic production of the Morning Report is produced which reflects gains, losses, and changes in duty status.

In turn, Statistical Services automatically provides the strength data and automatic preparation of the Morning Report becomes a by-product of records maintenance resulting in further major savings.

In each PCS action, those directly concerned, such as losing and gaining organizations and the central control agency, will receive the information which originates with the action agency.



SSgt. Lynn Simmons feeds a form 1C into the punch-reader unit of the proposed Auto Mate *personnel system.*

The heart of Auto Mate—*the PARR (Personnel Action, Recording and Reporting) machinery.*

Col. Gustav A. Neuberg, head of the HEDCOM evaluation test, checks a recommendation of one of the testing groups.

Mounds of paper work will be eliminated, dozens of people are freed for other work, and chances of clerical error are reduced to a minimum.

The very simplicity of the overall program was not arrived at overnight. Elimination of complexity and duplication, such as that which has evolved through decades of personnel management, is never simple.

Seeds of *Auto Mate* were sown nearly 13 years ago. At that time, Colonel Neuberg prepared a Command and Staff School paper on Personnel Allotting and Accounting, presenting a prototype for such a system. However, it was not until 1956 that the suggestion was advanced to the design stage.

Current HEDCOM activity is evidence that it has now passed the embryo level and development of personnel procedures and processes is well along.

When completed, these will be applied to more than 2,500 officers and airmen from Bolling AFB and detachments at other installations. Base personnel office operations will be simulated for the test and a comprehensive evaluation completed by May 1.

Officials who have been closest to *Auto Mate* are convinced that the program will succeed, that not only individuals, but the Air Force as well, will benefit handsomely as a result.

They point with justifiable pride to projected facts and figures to support this contention. For example, final conversion will allow transfer of several thousand personnel job slots to operational and weapon systems areas. This, in turn, is expected to reduce personnel management and administration costs by millions annually.

Similar savings are contemplated in office facilities, equipment and supplies; in transfers and assignments; in communications; and in other major cost areas.

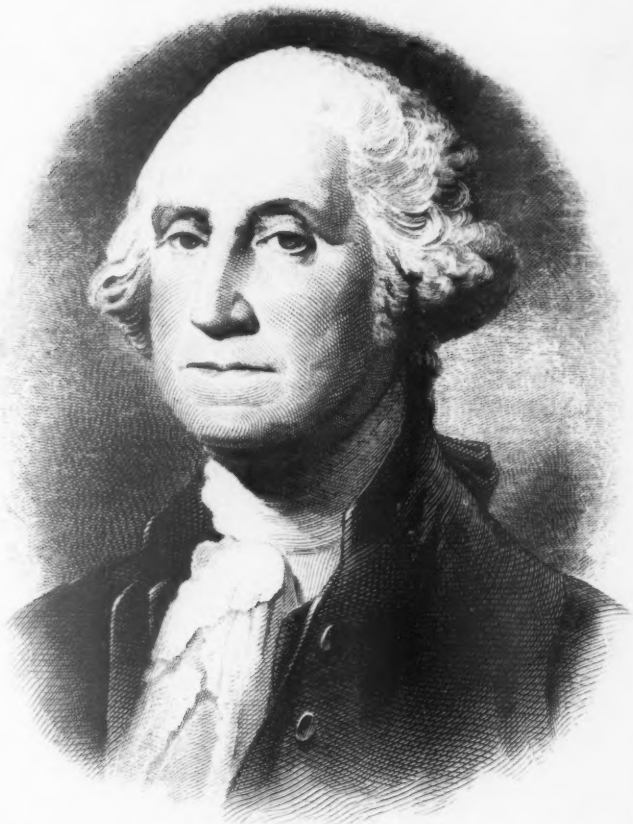
Many current administrative practices and pipeline procedures can be completely eliminated. The same holds for dozens of forms, records, and intermediate directives.

Finally, duplication will be shaved to an absolute mimimum when personnel managers and administrators begin using these new procedures.

These same officials are quick to agree that there will be a substantial outlay of dollars for installation of new equipment. However, present Statistical Services plans call for use of this equipment on a rental basis. Use of such equipment will insure superior service to all Air Force functional areas.

"Let's face it, aircraft have progressed from canvas and baling wire into the jet age," says General Clark, "but our personnel system is still in its pre-sonic stage despite numerous improvements. It is necessary that we maintain a management status at least equal if not superior to that demonstrated in other Air Force areas.

"We believe *Auto Mate* will provide us a solid foundation on which to build a military personnel management system. I know that several years will be required to implement *Project Auto Mate* fully, but," General Clark concluded, "we are convinced that we are headed in the right direction and making real progress."



Almighty God, we make our earnest prayer that Thou wilt keep the United States in Thy holy protection; that Thou wilt incline the hearts of the citizens to cultivate a spirit of subordination and obedience to government; to entertain a brotherly affection and love for one another and for their fellow-citizens of the United States at large.

George Washington
Prayer after Inauguration (1789)

"I do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America; that I will serve them honestly and faithfully against all enemies whomsoever; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to the regulations and the Uniform Code of Military Justice, so help me God!"

"I . . . having been appointed a . . . United States Air Force, do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign or domestic; that I will bear true faith and allegiance to the same; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the office upon which I am about to enter, so help me God!"